Washer-Extractors

Cabinet Freestanding

Refer to Page 8 for Model Identification

Installation/Operation/Maintenance

Original Instructions
Keep These Instructions for Future Reference.
(If this machine changes ownership, this manual must accompany machine.)

Alliance Laundry Systems

www.alliancelaundry.com

Part No. D1590ENR2
December 2014

Table of Contents

Safety Information 4
Explanation of Safety Messages 4
Important Safety Instructions 4
Safety Decals 7
Important Information Before Installation 7
Transportation and Storage 7
For Installation 7
Machine Information 7

Introduction 8
Model Identification 8
Replacement Parts 9
Customer Service 9

Technical Specifications 10
75/335, 90/400 and 125/520 Models Without Tilt Option 13
180/800, 230/1000 and 275/1200 Models Without Tilt Option 15
180/800 Models With Tilt Option 17
230/1000 Models With Tilt Option 19
275/1200 Models With Tilt Option 21

Installation 23
Handling, Transport and Storage 23
Transport and Storage 23
Handling During Installation 23
Unpacking 23
Space Requirements 23
Required Machine Working Conditions 23
Size of a Laundry Room 23
Machine Positioning 24
Machine Anchoring 24
75/335, 90/400 and 125/520 Models 25
180/800, 230/1000 and 275/1200 Models 27
Machine Anchoring - 90/400 and 125/520 Models With Tilt Option 29
Machine Anchoring - 180/800, 230/1000 and 275/1200 Models With Tilt Option 30
Connections 31
Water Connection 31
Water Consumption 32
Water Drain Connection 32
Steam Connection 32
Venting 33
Electrical Connection 33
Liquid Soap Connection 39
Electrical Connection 40
Electronic Controller with Blue PCB and Graphical Display 40

© Copyright 2014, Alliance Laundry Systems LLC

All rights reserved. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the expressed written consent of the publisher.

Putting the Machine into Service 41
Models 75/335, 90/400 and 125/520 41
Models 90/400 and 125/520 with Tilt Option 41
Models 180/800, 230/1000 and 275/1200 42
Checking Before Putting into Service 42
Operation 43
Symbols on the Machine 43
Hanging Control (Washers with Tilting System) 44
Micro Microprocessor 45
Before Washing 46
Opening the Door 46
Loading the Machine with Linen 46
Closing the Door 46
Program Selection 46
Wash Programs Overview 47
Add Detergent 47
Start the Washer 48
Micro Microprocessor 48
End of Wash Cycle 48
Models with the Tilt Option - Tilting the Machine Forward to a Position Suitable for Unloading the Linen 48
Models with the Tilt Option - Unloading the Linen 49
Models with the Tilt Option - Tilting the Machine to the Basic Position 49
Maintenance 50
Introduction 50
Daily 50
Monthly or After 200 Working Hours 50
Every 3 Months or After 500 Working Hours 50
Every 6 Months or After 1000 Working Hours 51
Safety Vibration Switch 51
Function Description - Models 75/335, 90/400 and 125/520 51
Function Description - Models 180/800, 230/1000 and 275/1200 51
Sensibility Adjustment - Models 75/335, 90/400 and 125/520 52
Sensibility Adjustment - Models 180/800, 230/1000 and 275/1200 52
Lubrication 57
Lubrication Points, Quantity and Lubrication Periods - Models 75/335, 90/400 and 125/520 57
Lubrication Points, Quantity and Lubrication Periods - Models 180/800, 230/1000 and 275/1200 57

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Driving Mechanism 58
Inspection of Belt Tightness 58
Belt Replacement 58
Pulley Alignment 58
Steam Filters 59
Cleaning the Filter 59
Thrust of Door Seal 59
Adjusting on the Side of the Door Handle 59
Spring Unit - Models 75/335, 90/400 and 125/520 61
Spring Unit - Models 180/800, 230/1000 and 275/1200 62
Replacement Washer Fuses 62
Fuse Values 62
Earth Leakage Trips 62
The Test Procedure 62
Troubleshooting Aids 63
Door Blocking 63
Description of Door Lock Function 63
Lock without Tensions before the Program Start 63
Main Switch and Emergency Stop Button are Switched On 63
Current Failure During Operation 63
Unblocking the Door Lock in Case of Emergency 63
Error Indication Shown on Display 64
Putting the Machine out of Service 65
Disconnecting the Machine 65
Machine Disposal 66
Possibility of the Machine Disposal by a Specialized Company 66
Possibility of the Machine Liquidation by Own Potential 66

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Safety Information

Explanation of Safety Messages

Precautionary statements ("DANGER," "WARNING," and "CAUTION"), followed by specific instructions, are found in this manual and on machine decals. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

DANGER

Indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.

WARNING

Indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.

CAUTION

Indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.

Additional precautionary statements ("IMPORTANT" and "NOTE") are followed by specific instructions.

IMPORTANT: The word "IMPORTANT" is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE: The word "NOTE" is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

Important Safety Instructions

WARNING

SAVE THESE INSTRUCTIONS FOR LATER USE. Failure to comply with the instructions may lead to incorrect use of the appliance, and may result in risk of fire, bodily injuries or death and/or damage to the laundry and/or the appliance.

W828

WARNING

Read the IMPORTANT SAFETY INSTRUCTIONS in this manual carefully before operating the appliance. Improper use of the appliance may cause risk of fire, electrical shock or serious body injuries or death as well as serious damage to the appliance.

W829

This English version is the original version of this manual. Without this version, the instructions are incomplete.

Before installation, operation and maintenance of the machine read carefully the complete instructions, i.e., this "Installation, maintenance and user's manual", "Programming manual" and "Spare parts manual". The Spare parts manual is not delivered with a machine by default. You shall ask the supplier/ manufacturer to obtain Spare parts manual.

WARNING

To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:

W023

1. Read all instructions before using the washer.
2. Install the washer according the INSTALLATION instructions. Refer to the EARTHING (grounding) instructions in the INSTALLATION manual for the proper earthing (grounding) of the washer. All connections for water, drain, electrical power and earthing (grounding) must comply with local codes and be made by licensed personnel when required. It is recommended that the machine be installed by qualified technicians.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

3. Do not install or store the washer where it will be exposed to water and/or weather.
4. To prevent fire and explosion, keep the area around machine free from flammable and combustible products. Do not add the following substances or textiles containing traces of the following substances to the wash water: gasoline, kerosene, waxes, cooking oils, vegetable oils, machine oils, dry-cleaning solvents, flammable chemicals, thinners, or other flammable or explosive substances. These substances give off vapors that could ignite, explode or cause the fabric to catch fire by itself.
5. Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using a washing machine or combination washer-dryer, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. The gas is flammable, do not smoke or use an open flame during this time.
6. To reduce the risk of an electric shock or fire, DO NOT use an extension cord or an adapter to connect the washer to the electrical power source.
7. Do not allow children to play on or in the washer. Close supervision of children is necessary when the washer is used near children. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance. This is a safety rule for all appliances.
8. DO NOT reach and/or climb into the tub or onto the washer, ESPECIALLY if the wash drum is moving. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
9. Never operate the washer with any guards, panels and/or parts removed or broken. DO NOT bypass any safety devices or tamper with the controls.
10. Use washer only for its intended purpose, washing textiles. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket or tub.
11. Use only low-sudsing, no-foaming types of commercial detergent. Be aware that hazardous chemicals may be present. Wear hand and eye protection when adding detergents and chemicals. Always read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings or precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
12. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
13. Always follow the fabric care instructions supplied by the textile manufacturer.
14. Loading door MUST BE CLOSED any time the washer is to fill, tumble or spin. DO NOT bypass the loading door switch by permitting the washer to operate with the loading door open. Do not attempt to open the door until the washer has drained and all moving parts have stopped.
15. Be aware that hot water is used to flush the supply dispenser. Avoid opening the dispenser lid while the machine is running.
16. Do not attach anything to the supply dispenser's nozzles, if applicable. The air gap must be maintained.
17. Do not operate the machine without the water reuse plug or water reuse system in place, if applicable.
18. Be sure water connections have a shut-off valve and that fill hose connections are tight. CLOSE the shut-off valves at the end of each wash day.
19. Keep washer in good condition. Bumping or dropping the washer can damage safety features. If this occurs, have washer checked by a qualified service person.
20. DANGER: Before inspecting or servicing machine, power supply must be turned OFF. The servicer needs to wait for at least 10 minutes after turning the power OFF and needs to check for residual voltage with a voltage meter. The inverter remains charged with high voltage for some time after powering OFF. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death. Before starting inspection of the inverter, check for residual voltage across main circuit terminals + and -. This voltage must be below 30 VDC before the servicer can access the inverter for inspection.
21. Do not repair or replace any part of the washer, or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out. ALWAYS disconnect the washer from electrical, power and water supplies before attempting any service.
22. Disconnect the power by turning off the circuit breaker or by unplugging the machine. Replace worn power cords.
23. Before the washer is removed from service or discarded, remove the door to the washing compartment.
24. Failure to install, maintain, and/or operate this washer according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

NOTE: The WARNINGS and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining, or operating the washer.

Always contact your dealer, distributor, service agent or the manufacturer on any problems or conditions you do not understand.

WARNING

This appliance must be connected to a grounded metal, permanent wiring system, and additionally an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.

W830

WARNING

In order to minimize the risk of fire, electrical shock and injury, <u>THIS WASHER MUST BE PROPERLY GROUNDED</u>. Never plug in or direct-wire an appliance unless it is properly grounded in accordance with all local and national codes. If more appliances are in the same location, mutual grounding must be applied where possible.

W831

WARNING

It is recommended to consult static requirements with a static engineer to meet the requirements of permissible loading, vibrations and noise level in the building.

W839

WARNING

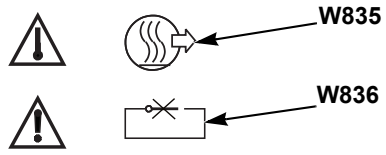
The washer extractor is intended to be permanently connected, it MUST be secured mounted to a NON-COMBUSTIBLE, adequate floor structure. NEVER install the washer on an upper floor or over a basement without a load support designed by a structural engineer.

W832

WARNING

Always disconnect the washer from the electrical supply before attempting any service. The washer extractor is out of tension if the main plug is taken out or when the main supply is disconnected. When the main switch is turned off the inlet terminals of the machine main switch are still under current!

W834



CFD822N

Figure 1

CAUTION

Extreme hot conditions can arise in the air around the machine. Watch out for vapor that escapes from the washer extractor venting!

W835

CAUTION

Do not cover the washer extractor venting. It serves as a vapor outlet to prevent pressure building in the washer extractor.

W836

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Safety Decals

WARNING

Do not remove warning signs placed on the appliance. Observe signs and labels to avoid personal injuries. Safety labels appear at crucial locations on the appliance. Failure to maintain legible safety labels could result in injury to the operator or service technician.

W833

WARNING

Original or identical parts must be used for replacement in this machine. After servicing, replace and secure all panels in the original way. Take these measures for continued protection against electrical shock, injury, fire and/or property damage.

W837

Important Information Before Installation

Transportation and Storage

IMPORTANT: In case of transportation and storage, watch components protruding from the contour line of machine (door locks, etc.) to avoid injuries.

- Never push, pull or exert pressure on components protruding from the machine contour line (controls, door locks, etc.).
- Make sure that these components are secured so as to avoid damages during machine manipulation and installation.
- In case of machine transportation by the customer, follow the manufacturer's instructions for transportation, handling and storage of the product. In case of transportation of the machine by customer, the manufacturer is not responsible for possible damage to the machine in the course of transportation. In case of storing the machine in a free area, it must be protected against mechanical damage and weather conditions.

For Installation

IMPORTANT: All connections must be performed by qualified personnel with a proper authorization according to this manual in compliance with local standards

- The washer must not be installed or stored in an area where it will be exposed to water and/or weather. Avoid damp conditions where water or moisture could run down the walls and covers of the washer or cover the floor around the washer. Do not install the washer above an open gutter. Close any nearby gutters so that the waste water steam cannot collect near/inside the washer.
- Any changes in the machine installation must be approved by the dealer or manufacturer. Otherwise, the dealer or manufacturer is not responsible for possible injuries or damages. Interference and changes in the machine construction are not allowed and the manufacturer refuses an responsibilities in such cases.
- Define dangerous areas in the laundry room and do not allow people to enter if the machine is in operation.

Machine Information

- This manual comprises information for the soft-mount machine series 75/335, 90/400, 125/520, 180/800, 230/1000 and 275/1200. Verify the machine model according to your order and the data plate located on the machine rear and find corresponding information in the manual.
- The machines are controlled by electronic controller. Find the programming instructions in the ***Programming Manual***.
- Additional heating can be provided by electrical heating elements or by steam from an external steam supply.
- Water inlets can use warm, cold, soft and cold hard water. A machine can be equipped with recycled discharging, dosing pumps for liquid soaps and/or a tilting system.
- Electrical setup of the machine is indicated on the data plate (*Figure 2*, pos. 11).

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Introduction

Model Identification

Information in this manual is applicable to the following models:

HY125_MICRO	IY125_MICRO	SYN125W	UY275_MICRO
HY90_MICRO	IY180_MICRO	UX180_MICRO	UY90_MICRO
HYN125W	IY230_MICRO	UX230_MICRO	UYN090W
HYN90W	IY275_MICRO	UX275_MICRO	UYN125W
IX180_MICRO	IY90_MICRO	UXR180W	UYN180W
IX230_MICRO	IYN090W	UXR230W	UYN230W
IX275_MICRO	IYN125W	UXR275W	UYN275W
IXR180W	SY125_MICRO	UY125_MICRO	
IXR230W	SY90_MICRO	UY180_MICRO	
IXR275W	SYN090W	UY230_MICRO	

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Replacement Parts

If literature or replacement parts are required, contact the source from which the machine was purchased or contact Alliance Laundry Systems at +1 (920) 748-3950 for the name and address of the nearest authorized parts distributor.

Customer Service

Contact your local distributor or call:

Alliance Laundry Systems
Shepard Street
P.O. Box 990
Ripon, WI 54971-0990
U.S.A.
www.alliancelaundry.com

Phone: +1 (920) 748-3121
Ripon, Wisconsin

Alliance International
+32 56 41 20 54
Wevelgem, Belgium

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Technical Specifications

Specification		75/335	90/400	125/520	180/800	230/1000	275/1200
Machine Dimensions[1] – Models Without Tilt Option							
Width	mm/inch	1195/47.04	1195/47.04	1195/47.04	1495/58.86	1790/70.47	1855/73.03
Depth	mm/inch	1330/52.40	1430/56.30	1610/63.40	1940/76.38	2005/78.94	2085/82.09
Height	mm/inch	1905/75.00	1905/75.00	1905/75.00	1985/78.15	2060/81.10	2085/82.09
Machine Dimensions[1] – Models With Tilt Option							
Width	mm/inch	-	-	-	1565/61.61	1855/73.03	1895/74.61
Depth	mm/inch	-	-	-	2020/79.53	2100/82.68	2155/84.84
Height	mm/inch	-	-	-	2215/87.20	2300/90.55	2335/91.93
Packing Dimensions – Models Without Tilt Option							
Width	mm/inch	1430/56.30	1430/56.30	1430/56.30	1690/66.53	1865/73.42	2000/78.73
Depth	mm/inch	1475/58.10	1570/61.80	1750/68.90	1950/76.77	2125/83.66	2170/85.43
Height	mm/inch	2105/82.90	2105/82.90	2105/82.90	2200/86.61	2345/92.33	2340/92.12
Transportation volume	m^3/ft^3	4.4/156	4.7/166	5.3/187	7.25/256	9.29/328	10.16/359
Packing Dimensions – Models With Tilt Option							
Width	mm/inch	-	-	-	1690/66.54	2040/80.31	2040/80.31
Depth	mm/inch	-	-	-	2075/81.69	2375/93.50	2375/93.50
Height	mm/inch	-	-	-	2440/96.06	2490/98.03	2490/98.03
Transportation volume	m^3/ft^3	-	-	-	8.90/314	11.85/419	12.42/439
Drum Dimensions							
Diameter	mm/inch	914/36.00	914/36.00	914/36.00	1110/43.70	1200/47.24	1300/51.18
Depth	mm/inch	510/20	610/24	790/31.10	838/33	860/33.85	870/34.25
Drum volume	dm^3/gal.	335/88	400/106	518/137	807/213	1003/265	1180/312
Door opening	mm/inch	540/21.30	540/21.30	540/21.30	530/20.86	530/20.86	650/25.59
Weight – Models Without Tilt Option							
Net	kg/lb.	1190/2623	1560/3439	1630/3594	2640/5820	3170/6989	3480/7672
Gross	kg/lb.	1310/2888	1700/3748	1770/3902	2830/6239	3410/7518	3710/8179
Weight – Models With Tilt Option							
Net	kg/lb.	-	-	-	2990/6592	3520/7761	3840/8466
Gross	kg/lb.	-	-	-	3210/7077	3760/8290	4060/8951
Electrical Data							
Power supply deviations		3x380-415V 50/60Hz 3x440-480V 50/60Hz 3x200-240V 50/60Hz			3x208-240V 50/60Hz 3x380-480V 50/60HZ		
-6% to +10% of the voltage supply ±1 Hz							
Motor output	kW	4	7.5	7.5	11	15	18.5
Input Power							
Electric heating 24kW	kW	28.1	-	-	-	-	-
Electric heating 36kW	kW	-	43.6	-	-	-	-
Electric heating 54kW (380-480V)	kW	-	-	61.6	-	-	-
Electric heating 67.5kW	kW	-	-	-	75	-	-
Steam or without heating	kW	4.1	7.6	7.6	11.25	15.25	18.75

Table 1 (Continued)

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Table 1 (Continued)

Specification		75/335	90/400	125/520	180/800	230/1000	275/1200
Supply Protection Device Use slow type Protection devices (circuit breakers: curve D)							
Residual current device (RCD) mA		100, class B	100, class B	100, class B	100, class B	100, class B	100, class B
Steam or without heating							
200-240V 3AC	A	30	40	40	-	-	-
380-480V 3AC	A	16 (15)	20	20	-	-	-
3x208-240V 50/60Hz	A	-	-	-	63	75	100
3x380-480V 50/60 Hz	A	-	-	-	32	50	63
El. Heating 24kW (220-240V)	A	80	-	-	-	-	-
El. Heating 24kW (380-415V)	A	50	-	-	-	-	-
El. Heating 24kW (440-480V)	A	32	-	-	-	-	-
El. Heating 36kW (200-240V)	A	-	120	-	-	-	-
El. Heating 36kW (380-480V)	A	-	80	-	-	-	-
El. Heating 54kW (220-240V)	A	-	-	160	-	-	-
El. Heating 54kW (380-480V)	A	-	-	100	-	-	-
El. Heating 67.5kW (3x208-240V)	A	-	-	-	250	-	-
El. Heating 67.5kW (3x208-240V)	A	-	-	-	125	-	-
Washing Functions							
Washing	RPM	38	38	38	36	33	32
High extracting	RPM	830	830	830	750	720	695
G-factor		350	350	350	350	350	350
Connection Data							
Water inlet connection	inch	BSP 1”			3 x BSP 1½”		
Water pressure range	MPa/bar/PSI	0.1 - 0.8/1 - 8/14.5 - 116					
Recommended water pressure	MPa/bar/PSI	0.3 - 0.5/3 - 5/43 - 73					
Maximal water temperature	°C/°F	90/194	90/194	90/194	90/194	90/194	90/194
Drain diameter	mm/inch	2 x 76/3	2 x 76/3	2 x 76/3	2 x 103/4	2 x 103/4	2 x Ø103/4
Drain flow rate	$dm^3\ min^{-1}$ $gal.\ min^{-1}$	300 80	300 80	300 80	540 142	516 136	516 136
Steam connection	inch	G 3/4 in.	G 3/4 in.	G 3/4 in.	G 1 in.	G 1 in.	G 1 in.
Steam pressure	MPA/bar/PSI	0.3 - 0.5/3 - 5/43 - 73					
Press air connection[2]	mm/inch	6/0.25	6/0.25	6/0.25	8/0.30	8/0.30	Ø 8/0.30
Not lubricated air pressure	MPa/bar/PSI	0.3 - 0.5/3 - 5/43 - 73	0.3 - 0.5/3 - 5/43 - 73	0.3 - 0.5/3 - 5/43 - 73	0.6/6/87	0.6/6/87	0.6/6/87
Powder dispenser cups Liquid soap signals		5 8 pumps	5 8 pumps	5 8 pumps	5 8 pumps	5 8 pumps	5 8 pumps
External liquid soap connections		6	6	6	6 tubes: 1 x ½ in.	6 tubes: 1 x ½ in.	1 x ½ in.
Hose for press air connection (Models with tilt option only)	mm/inch	-	8/0.31 outside diameter	8/0.31 outside diameter	8/0.31 outside diameter	8/0.31 outside diameter	8/0.31 outside diameter
Air pressure (Models with tilt option only)	MPa/bar/PSI	-	0.35/3.5/51	0.35/3.5/51	0.35/3.5/51	0.35/3.5/51	0.35/3.5/51
Motor Size	KW/HP	4.0/5.36	7.5/10.06	7.5/10.06	11.0/14.75	15.0/20.12	18.5/24.81

Table 1 (Continued)

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Table 1 (Continued)

Specification		75/335	90/400	125/520	180/800	230/1000	275/1200
General Data							
Ambient temperature	°C/°F	5 to 35/41 to 95					
Relative humidity		30% to 90% without condensation					
Height above sea level	m/ft.	up to 1000/3280					
Storage temperature	°C/°F	1 to 55/34 to 131					
Max. static load on floor (Models without tilt option)	kN	14.41	18.16	19.57	30.9	36.9	40.4
Max. static load on floor (Models with tilt option)	kN	-	19.4	20.86	34.4	40.4	43.9
Max. dynamic load on floor (Models without tilt option)	kN	12.7 ± 2.74	16.08 ± 2.94	17.06 ± 3.13	27.2 ± 4.5	32.7 ± 5.5	36.0 ± 7.0
Max. dynamic load on floor (Models with tilt option)	kN	-	17.11 ± 2.94	18.13 ± 3.13	30.6 ± 4.5	36.1 ± 5.5	39.5 ± 7.0
Frequency of dynamic load	Hz	14	14	14	12.5	12.1	11.7
Sound Levels[3]							
L_{Aeq} wash/extraction seq.	db	55/75	55/75	55/75	51/71	52/72	52/72

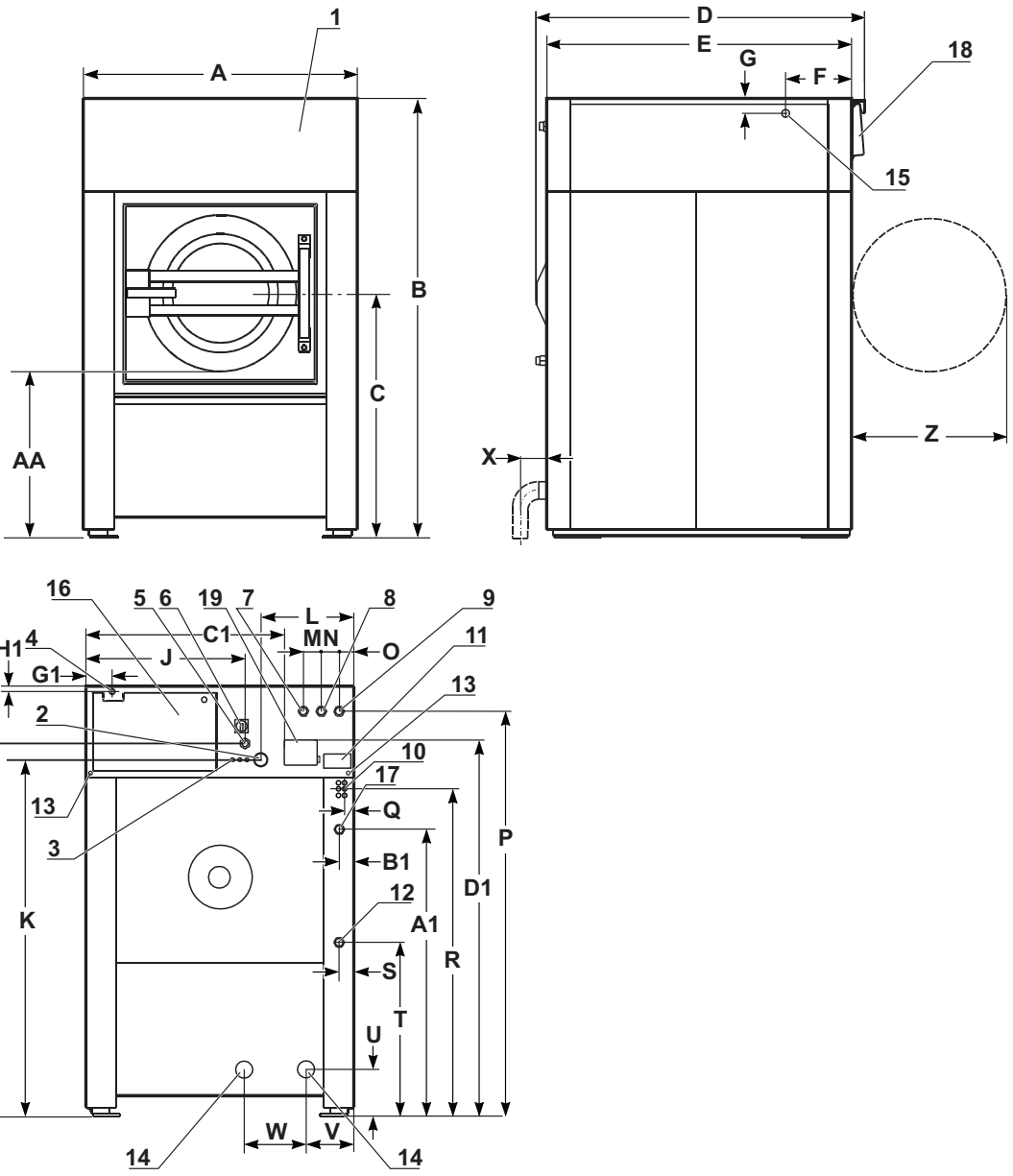
[1] maximum dimensions including protruding parts
[2] washers with air operated water valves
[3] ISO 3744

Table 1

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

75/335, 90/400 and 125/520 Models Without Tilt Option

NOTE: Refer to following page for dimensions.



1	Operator Panel	**11**	Data plate
2	Tub ventilation (60 mm/2.4 in.)	**12**	Steam inlet
3	Lubrication points	**13**	Equipotential bounding terminal
4	Entry soap supply cable	**14**	Drain outlet
5	Entry main power cable	**15**	Soap dispenser air relieve
6	Main switch	**16**	Frequency inverter cover
7	Hard cold water inlet	**17**	Compressed air inlet
8	Hot water inlet		(Models with air operated water valves)
9	Soft cold water inlet	**18**	Soap dispenser
10	Hose connection soap supply	**19**	Electrical signals liquid soap

Figure 2

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Dimensions – Models Without Tilt Option				
MACHINE		**75/335**	**90/400**	**125/520**
A	mm/inch	1195/47.04	1195/47.04	1195/47.04
A1	mm/inch	1361/53.58	1361/53.58	1361/53.58
B	mm/inch	1905/75	1905/75	1905/75
B1	mm/inch	116/4.56	116/4.56	116/4.56
C	mm/inch	1055/41.54	1055/41.54	1055/41.54
C1	mm/inch	980/38.58	980/38.58	980/38.58
D	mm/inch	1330/52.4	1430/56.3	1610/63.39
D1	mm/inch	1600/62.99	1600/62.99	1600/62.99
E	mm/inch	1222/48.11	1322/52.05	1502/59.13
F	mm/inch	300/11.8	300/11.8	300/11.8
G	mm/inch	50/1.97	50/1.97	50/1.97
G1	mm/inch	110/4.33	110/4.33	110/4.33
H	mm/inch	1617/63.66	1617/63.66	1617/63.66
H1	mm/inch	25/0.98	25/0.98	25/0.98
J	mm/inch	730/28.74	730/28.74	730/28.74
K	mm/inch	1567/61.69	1567/61.69	1567/61.69
L	mm/inch	422/16.61	422/16.61	422/16.61
M	mm/inch	80/3.15	80/3.15	80/3.15
N	mm/inch	80/3.15	80/3.15	80/3.15
O	mm/inch	70/2.75	70/2.75	70/2.75
P	mm/inch	1782/70.16	1782/70.16	1782/70.16
P*	mm/inch	1672/65.82	1672/65.82	1672/65.82
Q	mm/inch	60/2.36	60/2.36	60/2.36
R	mm/inch	1285/50.59	1285/50.59	1285/50.59
S	mm/inch	65/2.56	65/2.56	65/2.56
T	mm/inch	768/30.24	768/30.24	768/30.24
U	mm/inch	205/8.07	205/8.07	205/8.07
V	mm/inch	213/8.39	213/8.39	213/8.39
W	mm/inch	420/16.54	275/10.83	275/10.83
X	mm/inch	175/6.89	175/6.89	175/6.89
Z	mm/inch	700/27.56	700/27.56	700/27.56
AA	mm/inch	730/28.74	730/28.74	730/28.74

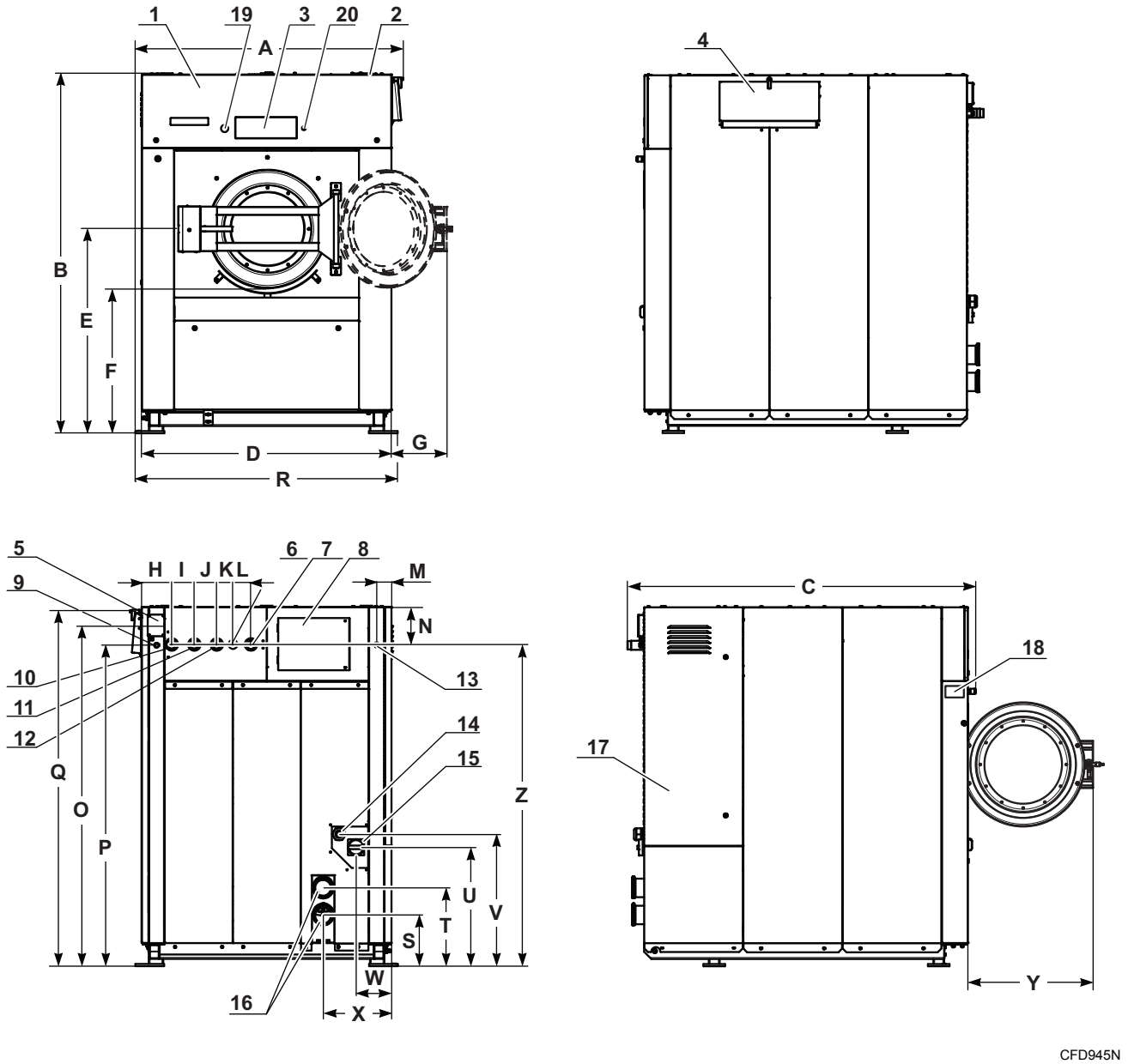
* Models with air-operated water valves

Table 2

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

180/800, 230/1000 and 275/1200 Models Without Tilt Option

NOTE: Refer to following page for dimensions.



1	Box of electrical components	**10**	Hard cold water inlet
2	Soap dispenser ventilation	**11**	Soft cold water inlet
3	Control panel	**12**	Hot water inlet
4	Soap dispenser	**13**	Compressed air inlet
5	Electrical signals liquid soap	**14**	Entry main power cable
6	Steam inlet	**15**	Main switch
7	Tub ventilation	**16**	Drain outlet
8	Cover for pneumatic components	**17**	Electric switchboard cover
9	Hose connection soap supply	**18**	Serial label

Figure 3

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Dimensions – Models Without Tilt Option				
MACHINE		**180/800**	**230/1000**	**275/1200**
A	mm/inch	1495/58.86	1790/70.47	1855/73.03
B	mm/inch	1985/78.15	2060/81.10	2085/82.09
C	mm/inch	1940/76.38	2005/78.94	2085/82.09
D	mm/inch	1390/54.72	1688/66.46	1754/69.05
E	mm/inch	1133/44.60	1175/46.26	1200/47.24
F	mm/inch	1020/40.16	1095/43.11	1080/42.52
G	mm/inch	303/11.93	232/9.13	295/11.61
H	mm/inch	168/6.61	232/9.13	247/9.72
I	mm/inch	125/4.92	125/4.92	125/4.92
J	mm/inch	125/4.92	125/4.92	125/4.92
K	mm/inch	90/3.54	124/4.88	120/4.72
L	mm/inch	100/3.93	110/4.33	148/5.83
M	mm/inch	83/3.27	83/3.27	83/3.27
N	mm/inch	210/8.26	210/8.26	210/8.26
O	mm/inch	1900/74.80	1518/59.76	1548/60.94
P(1)	mm/inch	1787/70.35	1405/55.31	1435/56.50
Q	mm/inch	1983/78.07	1950/76.77	1980/77.95
R	mm/inch	1460/57.48	1754/69.05	1820/71.65
S	mm/inch	282/11.10	268/10.55	243/9.57
T	mm/inch	437/17.20	419/16.50	394/15.51
U	mm/inch	662/26.06	696/27.40	722/28.43
V	mm/inch	735/28.93	768/30.24	795/31.30
W	mm/inch	197/7.76	197/7.76	197/7.76
X	mm/inch	380/14.96	527/20.75	562/22.13
Y	mm/inch	665/26.18	650/25.59	757/29.80
Z(2)	mm/inch	1787/70.53	1836/72.28	1866/73.46

(1) Height of item 9
(2) Height of items 6, 7, 10, 11 and 12

Table 3

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

180/800 Models With Tilt Option

NOTE: Refer to following page for dimensions.

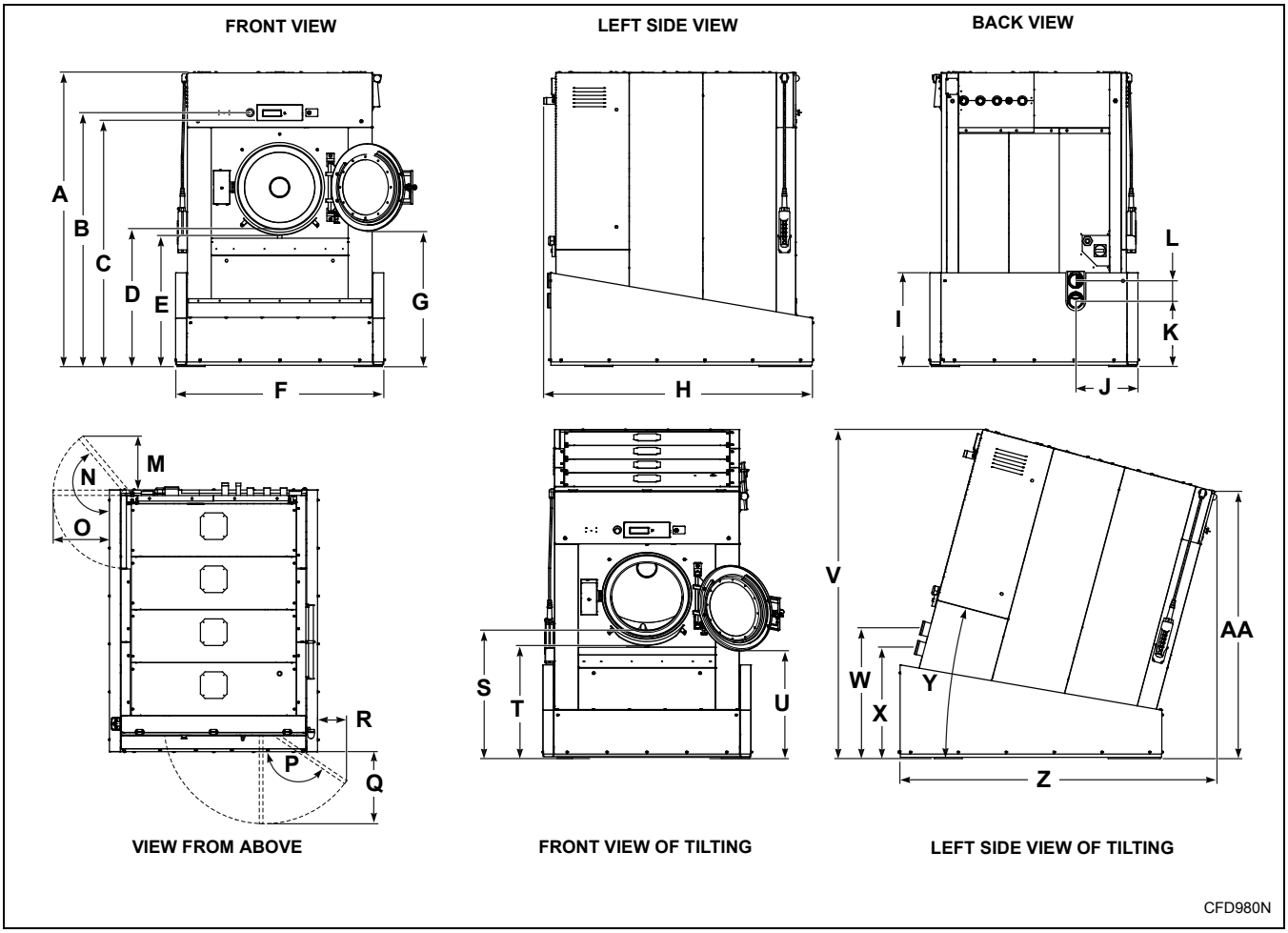


Figure 4

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Dimensions – Models With Tilt Option		
Dimensions		**180/800**
A	mm/inch	2215/87.20
B	mm/inch	1908/75.12
C	mm/inch	1850/72.83
D	mm/inch	1037/40.83
E	mm/inch	988/38.90
F	mm/inch	1565/61.61
G	mm/inch	1019/40.12
H	mm/inch	2020/79.53
I	mm/inch	705/27.76
J	mm/inch	468/18.43
K	mm/inch	491/19.33
L	mm/inch	155/6.10
M	mm/inch	407/16.02
N	mm/inch	140°
O	mm/inch	424/16.69
P	mm/inch	146°
Q	mm/inch	541/21.30
R	mm/inch	219/8.62
S	mm/inch	966/38.03
T	mm/inch	851/33.50
U	mm/inch	812/31.97
V	mm/inch	2476/97.48
W	mm/inch	983/38.70
X	mm/inch	837/32.95
Y	mm/inch	15°
Z	mm/inch	2380/93.70
AA	mm/inch	2009/79.09

Table 4

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

230/1000 Models With Tilt Option

NOTE: Refer to following page for dimensions.

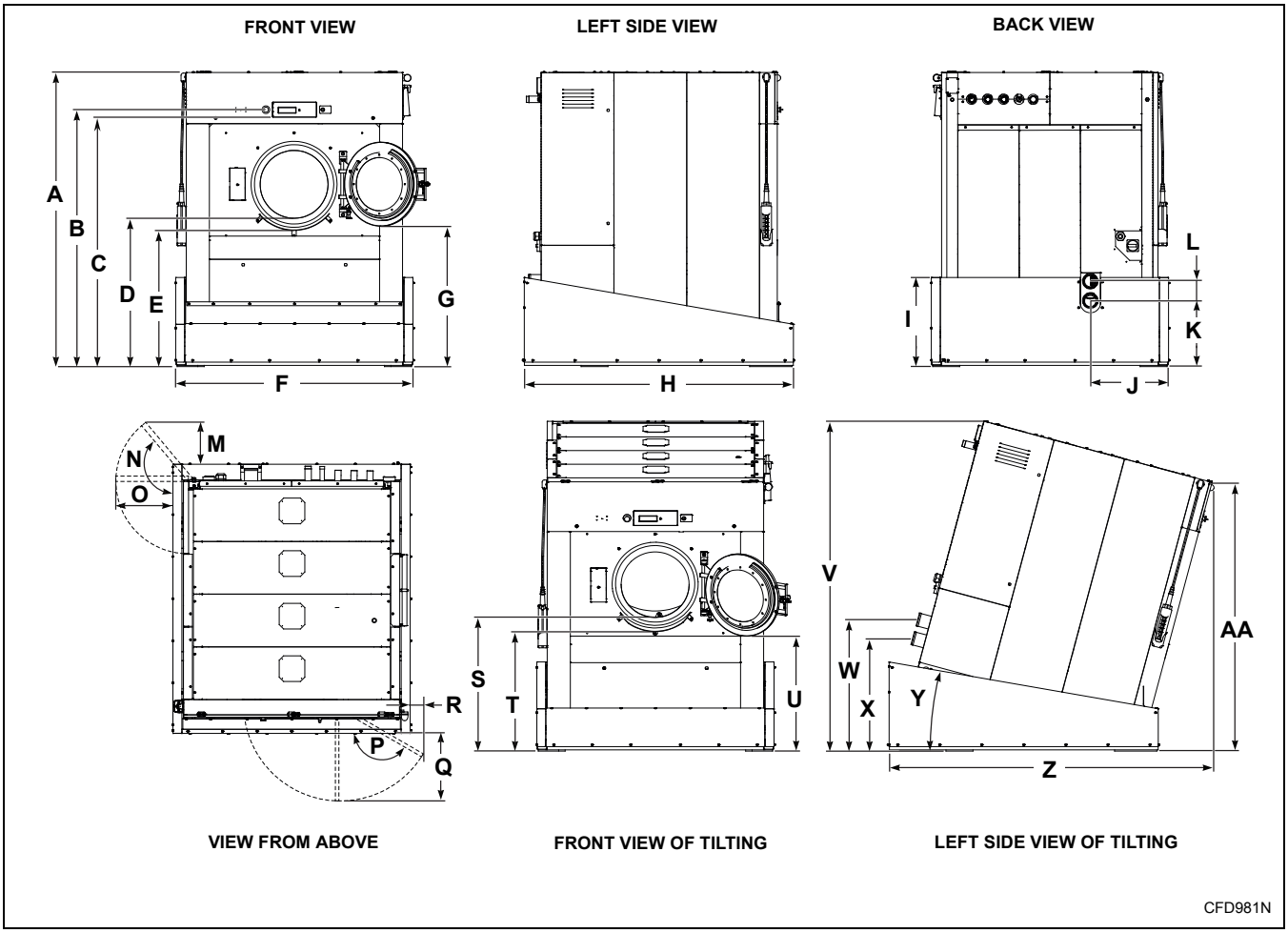


Figure 5

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

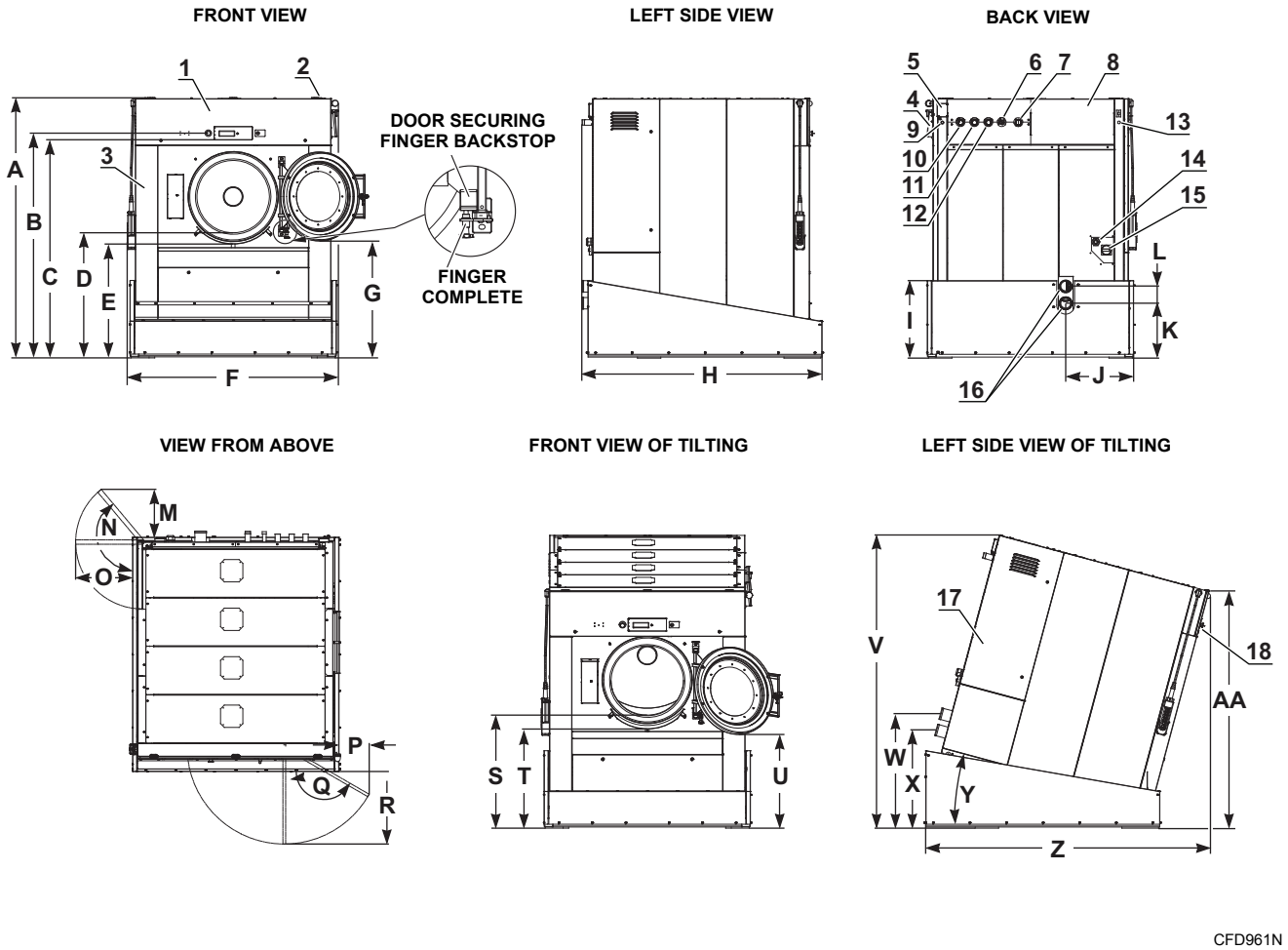
Machine Dimensions – Models With Tilt Option		
Dimensions		**230/1000**
A	mm/inch	2300/90.55
B	mm/inch	2004/78.9
C	mm/inch	1946/76.61
D	mm/inch	1158/45.59
E	mm/inch	1062/41.81
F	mm/inch	1855/73.03
G	mm/inch	1095/43.11
H	mm/inch	2100/82.68
I	mm/inch	695/27.36
J	mm/inch	610/24.02
K	mm/inch	511/20.12
L	mm/inch	155/6.10
M	mm/inch	326/12.83
N	mm/inch	140°
O	mm/inch	445/17.52
P	mm/inch	150°
Q	mm/inch	527/20.75
R	mm/inch	103/4.06
S	mm/inch	1045/41.14
T	mm/inch	932/36.69
U	mm/inch	900/35.43
V	mm/inch	2575/101.38
W	mm/inch	1027/40.43
X	mm/inch	881/34.69
Y	mm/inch	15°
Z	mm/inch	2534/99.76
AA	mm/inch	2098/82.60

Table 5

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

275/1200 Models With Tilt Option

NOTE: Refer to following page for dimensions.



1	Box of electrical components	**10**	Hard cold water inlet
2	Soap dispenser ventilation	**11**	Soft cold water inlet
3	Control panel	**12**	Hot water inlet
4	Soap dispenser	**13**	Compressed air inlet
5	Electrical signals liquid soap	**14**	Entry main power cable
6	Steam inlet	**15**	Main switch
7	Tub ventilation	**16**	Drain outlet
8	Cover for pneumatic components	**17**	Electric switchboard cover
9	Hose connection soap supply	**18**	Serial label

Figure 6

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Dimensions – Models With Tilt Option		
Dimensions		**275/1200**
A	mm/inch	2335/91.93
B	mm/inch	2015/79.33
C	mm/inch	1957/77.05
D	mm/inch	1149/45.20
E	mm/inch	1048 /41.26
F	mm/inch	1895/74.61
G	mm/inch	1082/42.60
H	mm/inch	2155/84.84
I	mm/inch	695/27.36
J	mm/inch	610/24.02
K	mm/inch	492/19.37
L	mm/inch	155/6.10
M	mm/inch	429/16.89
N	mm/inch	140°
O	mm/inch	511/20.12
P	mm/inch	271/10.67
Q	mm/inch	150°
R	mm/inch	651/25.63
S	mm/inch	1030/40.55
T	mm/inch	916/36.06
U	mm/inch	868/34.17
V	mm/inch	2628/103.46
W	mm/inch	1028/40.47
X	mm/inch	882/34.72
Y	mm/inch	15°
Z	mm/inch	2553/100.51
AA	mm/inch	2124/83.62

Table 6

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Installation

Handling, Transport and Storage

Transport and Storage

WARNING

Forks of lift truck must have sufficient length.

W838

Use a lift truck or a manual skid cart for handling the machine while in the transport package. If possible, leave the machine in the transport package or at least let it sit on the transport wooden skid until the time of final installation on the foundation.

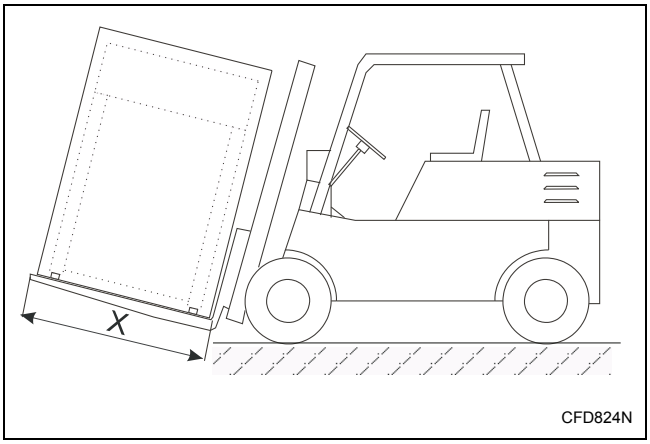


Figure 7

Handling During Installation

All activities should only be done by a worker who knows all information about the machine. The machine is delivered to the customer in a wooden skid packaging and protected with polyethylene film. The machine is attached to the skid by means of four bolts M16.

To remove the machine to its final location, follow these precautions:

1. All passages and spaces the machine has to be transported through at installation should be reasonably dimensioned to meet the height and width of the machine including the packaging.
2. Never push, pull or press the components protruding from the contour line of the machine (front part, filling door, control elements, belt cover, water inlet, outlet pipes, etc.).

NOTE: Make sure that these components are secured to avoid damage during handling and installation of the machine.

3. Make sure that the filling door is secured to avoid its opening during handling.
4. Lift the machine up by lift truck using a transport skid to which the machine has been attached.

Unpacking

After unpacking, check for any damage to the machine and that all accessories have been included with your order. Verify the type of your machine by the data plate located on the machine rear and find corresponding information in the manual. The accessories and the manual are located inside of the drum, according to the information found in *Door Blocking*.

Before the machine can be installed, remove the packaging, loosen four nuts and lift the machine carefully up. Make sure not to damage the machine components located in the machine's lower part. The lift truck forks must be at least 10 cm longer than the length of the washing machine frame (*Table 7*).

75/335, 90/400 and 125/520	180/800	230/1000 and 275/1200
1500 mm/59 in.	1800 mm/71 in.	2000 mm/78.73 in.

Table 7

Space Requirements

Required Machine Working Conditions

See *Technical Specifications* section.

The washer must not be installed or stored in an area where it will be exposed to water and/or weather. Avoid damp conditions where water or moisture could run down the walls and covers of the washer or cover the floor around the washer. Do not install the washer above an open gutter. Close any nearby gutters so that waste water steam cannot collect near/inside the washer.

Size of a Laundry Room

IMPORTANT: Ignoring the requirement for spaces between machines and walls can make service and maintenance work difficult.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Positioning

Total space requirements for the system installation are usually determined by a detailed plan of the building. The machine dimensions are stated in the *Technical Specifications* section.

Leave at least 1 m (39.36 inches) of space between the machine rear and the wall for maintenance access. On the left side of the machine a minimum of 620 mm (24.5 inches) is needed and 250 mm (10 inches) on the right side. Between the lateral sides of each machine, it is recommended to leave a space of 0.7 m (27.55 inches) for 75/335, 90/400 and 125/520 models and 0.8 m (31.49 inches) for 180/800, 230/1000 and 275/1200 models. There must be a minimum of 0.7 m (27.55 inches) of free space above the machine for maintenance access. Refer to *Figure 8* and *Table 9*.

The waste piping or outlet channel must be dimensioned to the discharged water quantity and the number of washing machines.

Machine Anchoring

WARNING

It is recommended to consult static requirements with a static engineer to meet the requirements of permissible loading, vibrations and noise level in the building.

W839

WARNING

The washer extractor is intended to be permanently connected, it MUST be secured mounted to a NON-COMBUSTIBLE, adequate floor structure. NEVER install the washer on an upper floor or over a basement without a load support designed by a structural engineer.

W832

IMPORTANT: Anchoring the machine is necessary when the floor is uneven, may become slippery, or is constructed of variable surfaces. Anchoring the machine is also necessary in any cases where there is a risk of the machine moving along the floor's surface during operation.

The machine is to be located on a leveled concrete floor to comply with static and dynamic stress of the machine. Check the position of the machine base frame using a level. The manufacturer is not responsible for consequences caused by a wrong installation. Refer to *Figure 8* and *Table 10* for 75/335, 90/400 and 125/520 models without the tilt option or to *Figure 9* and *Table 11* for 180/800, 230/1000 and 275/1200 models without the tilt option for mounting bolt specifications. Please refer to *Figure 13* and *Table 13* for the mounting bolt specifications for models with the tilt option.

WARNING

The nuts of the anchoring bolts have to be tightened by means of a torque - limiting wrench. Do not tighten the nuts of anchoring bolts before the concrete base around the bolts is completely cured.

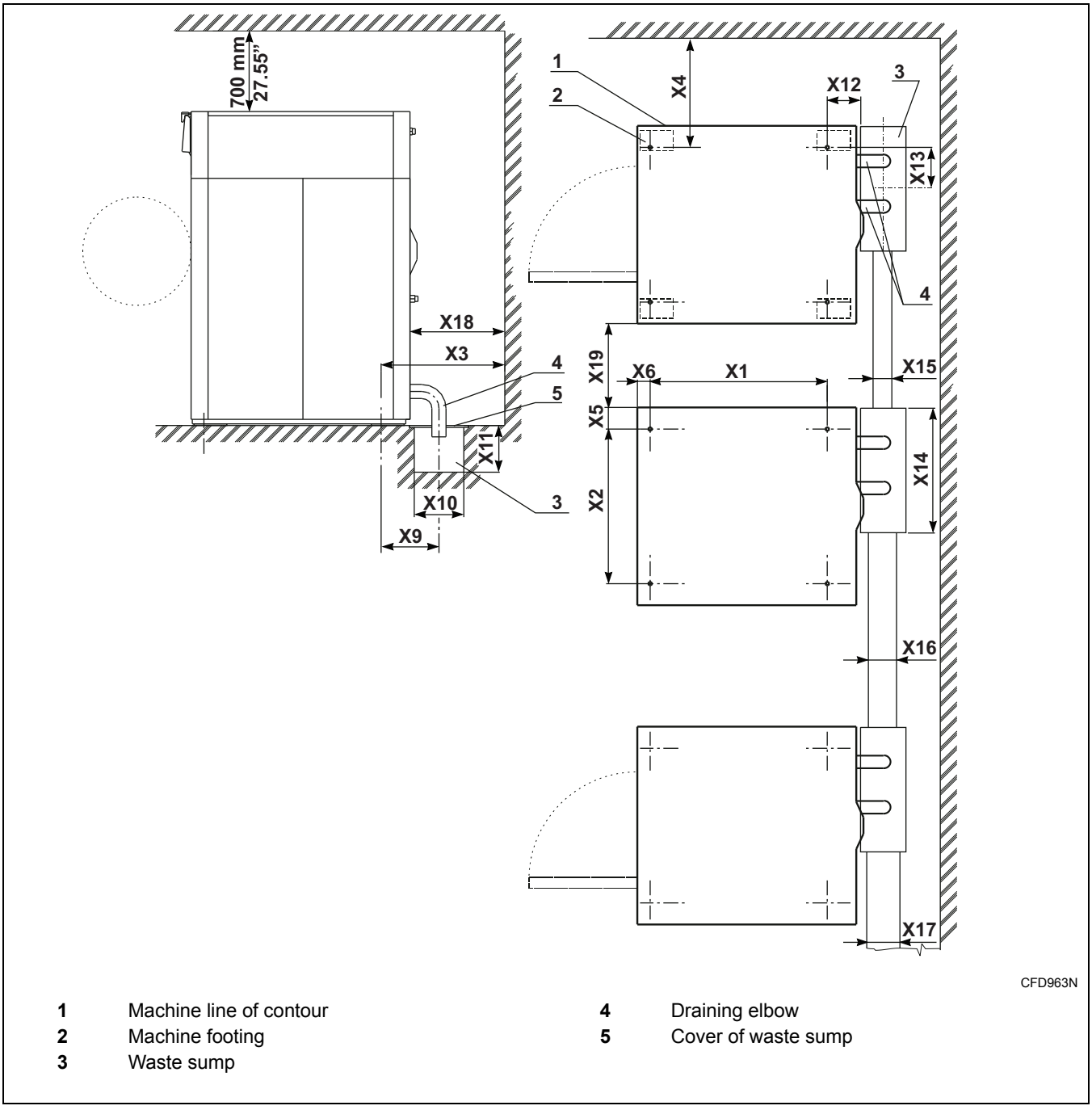
W840

Model	Hardware	Torque Value (Nm/lb.-ft.)
75/335, 90/400 and 125/520 Models Without Tilt Option	M16 x 160	210/155
75/335, 90/400 and 125/520 Models With Tilt Option	Anchoring Bolt	80/59
	Threaded Rod	133/98
180/800, 230/1000 and 275/1200 Models Without Tilt Option	M10 x 160	49/36
180/800, 230/1000 and 275/1200 Models With Tilt Option	Anchoring Bolt	80/59

Table 8

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

75/335, 90/400 and 125/520 Models



1	Machine line of contour	**4**	Draining elbow
2	Machine footing	**5**	Cover of waste sump
3	Waste sump		

Figure 8

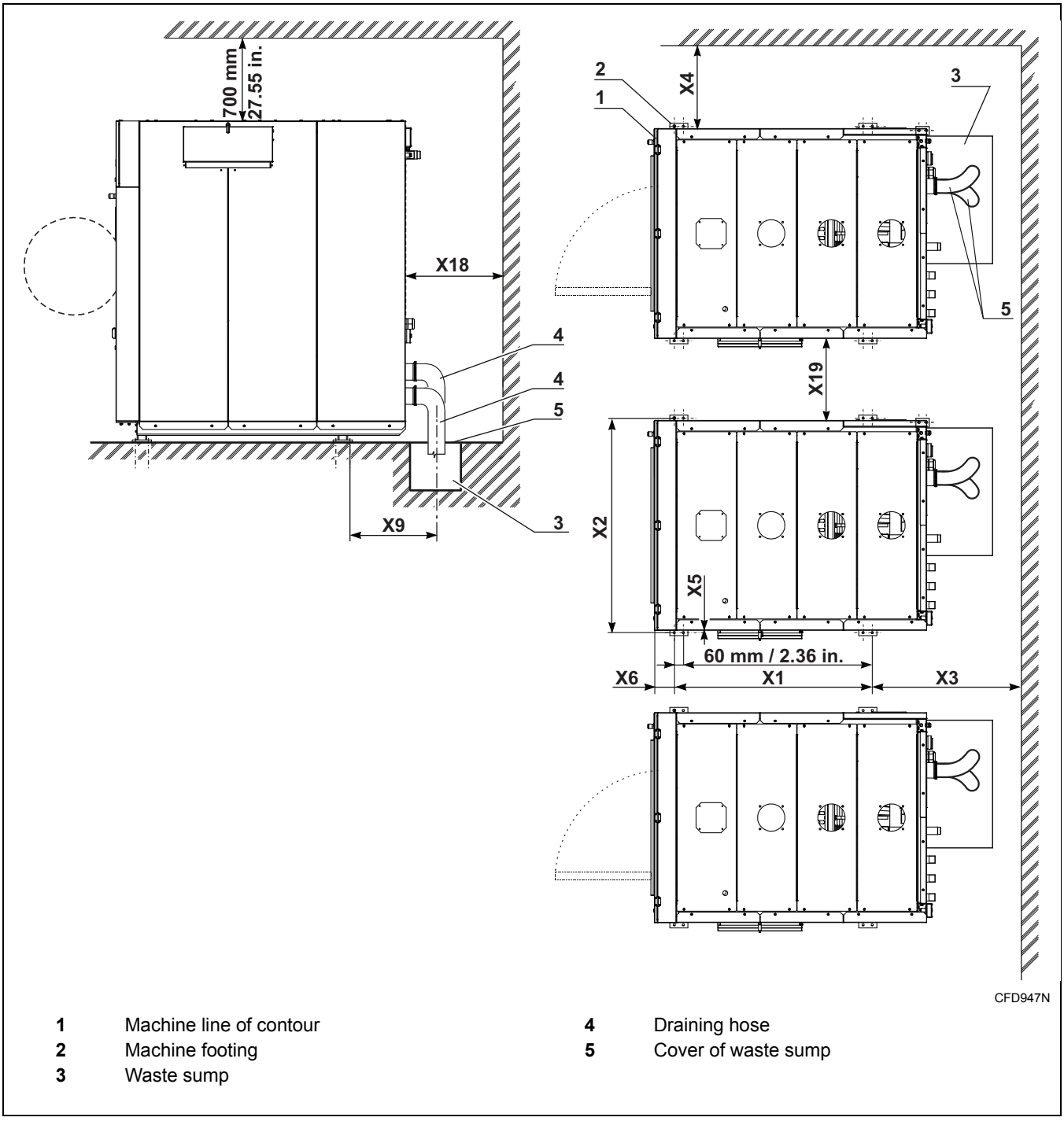
© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Positioning				
Dimensions		**75/335**	**90/400**	**125/520**
X1	mm/inch	970/38.18	1070/42.13	1250/49.21
X2	mm/inch	930/36.61	930/36.61	930/36.61
X3	mm/inch	1175/46.25	1175/46.25	1175/46.25
X4	mm/inch	830/32.67	830/32.67	830/32.67
X5	mm/inch	130/5.12	130/5.12	130/5.12
X6	mm/inch	77/3.03	77/3.03	77/3.03
X9	mm/inch	350/13.77	350/13.77	350/13.77
X10	mm/inch	300/11.81	300/11.81	300/11.81
X11	mm/inch	250/9.84	250/9.84	250/9.84
X12	mm/inch	200/7.87	200/7.87	200/7.87
X14	mm/inch	750/29.52	750/29.52	750/29.52
X15	mm/inch	150/5.9	150/5.9	150/5.9
X16	mm/inch	180/7.08	180/7.08	180/7.08
X17	mm/inch	200/7.87	200/7.87	200/7.87
X18	mm/inch	1000/39.36	1000/39.36	1000/39.36
X19	mm/inch	700/27.55	700/27.55	700/27.55

Table 9

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

180/800, 230/1000 and 275/1200 Models



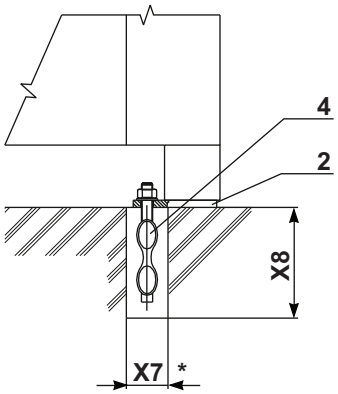
1	Machine line of contour	**4**	Draining hose
2	Machine footing	**5**	Cover of waste sump
3	Waste sump		

Figure 9

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Positioning				
Dimensions		**180/800**	**230/1000**	**275/1200**
X1	mm/inch	1310/51.57	1388/54.64	1400/55.11
X2	mm/inch	1420/55.9	1715/67.51	1780/70.07
X3	mm/inch	1065/41.92	1332/52.44	1332/52.44
X4	mm/inch	780/30.70	780/30.70	780/30.70
X5	mm/inch	15/0.59	13/0.51	15/0.59
X6	mm/inch	132/5.20	132/5.20	145/5.71
X9	mm/inch	415/16.33	415/16.33	415/16.33
X18	mm/inch	1000/39.36	1000/39.36	1000/39.36
X19	mm/inch	700/27.55	800/31.49	800/31.49

Table 10



MACHINE ANCHORING – 75/335, 90/400 AND 125/520 MODELS WITHOUT TILT OPTION

CFD964N

2 Machine footing

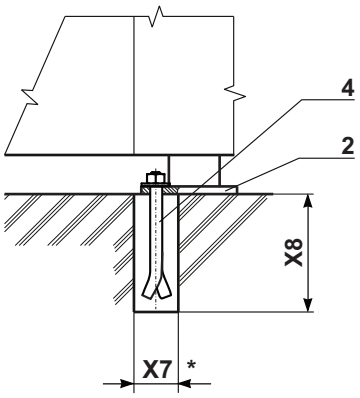
4 Anchoring bolt – not supplied with machine, (on request)

* - hole optimized for new floor, drilled hole can be smallish dimension

Figure 10

X7	mm/inch	60/2.36
X8	mm/inch	160/6.29

Table 11



MACHINE ANCHORING – 180/800, 230/1000 AND 275/1200 MODELS WITHOUT TILT OPTION

CFD948N

2 Machine footing

4 Anchoring bolt – not supplied with machine, (on request)

* - hole optimized for new floor, drilled hole can be smallish dimension

Figure 11

X7	mm/inch	40/1.57
X8	mm/inch	150/5.9

Table 12

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Anchoring - 90/400 and 125/520 Models With Tilt Option

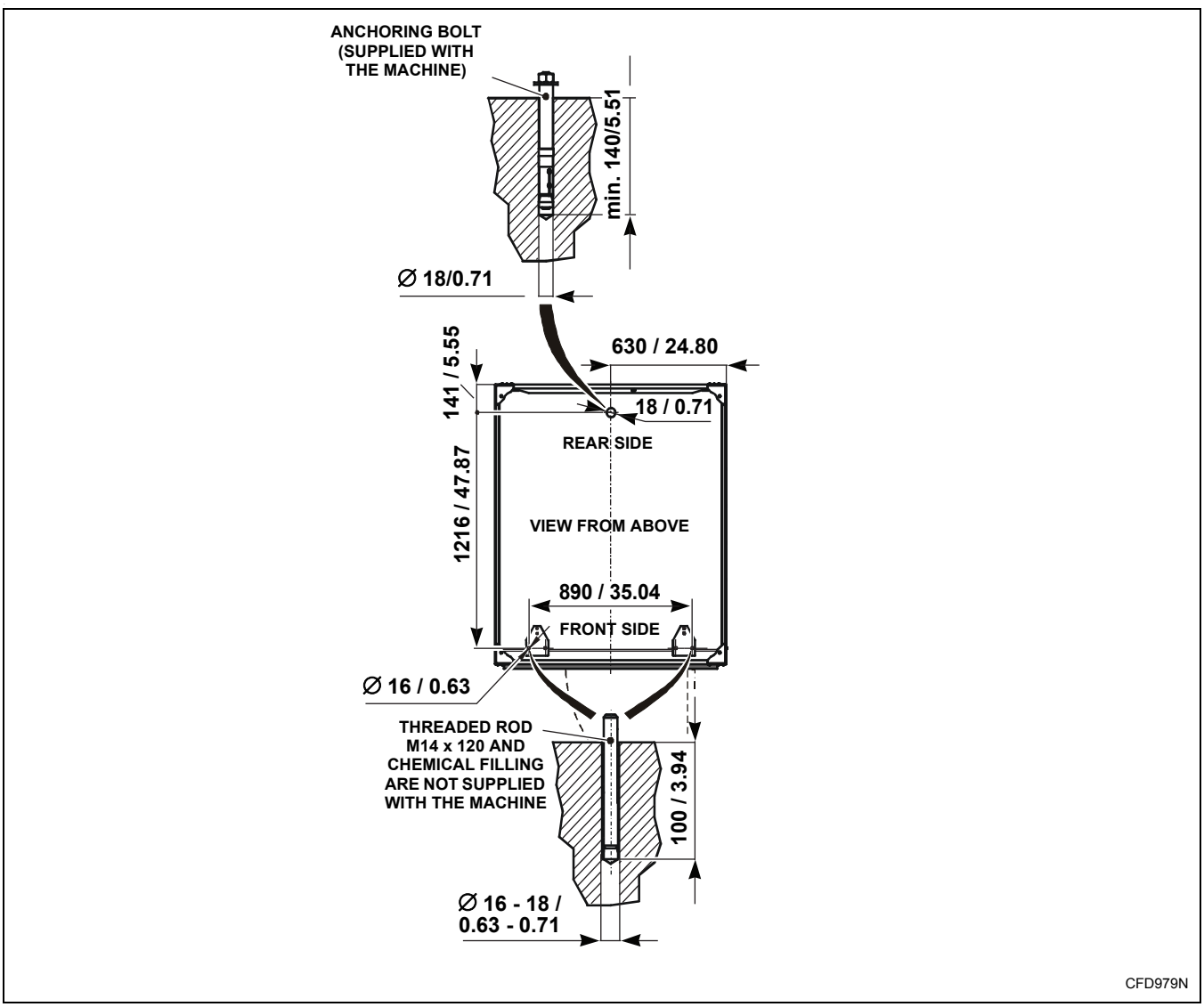


Figure 12

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Anchoring - 180/800, 230/1000 and 275/1200 Models With Tilt Option

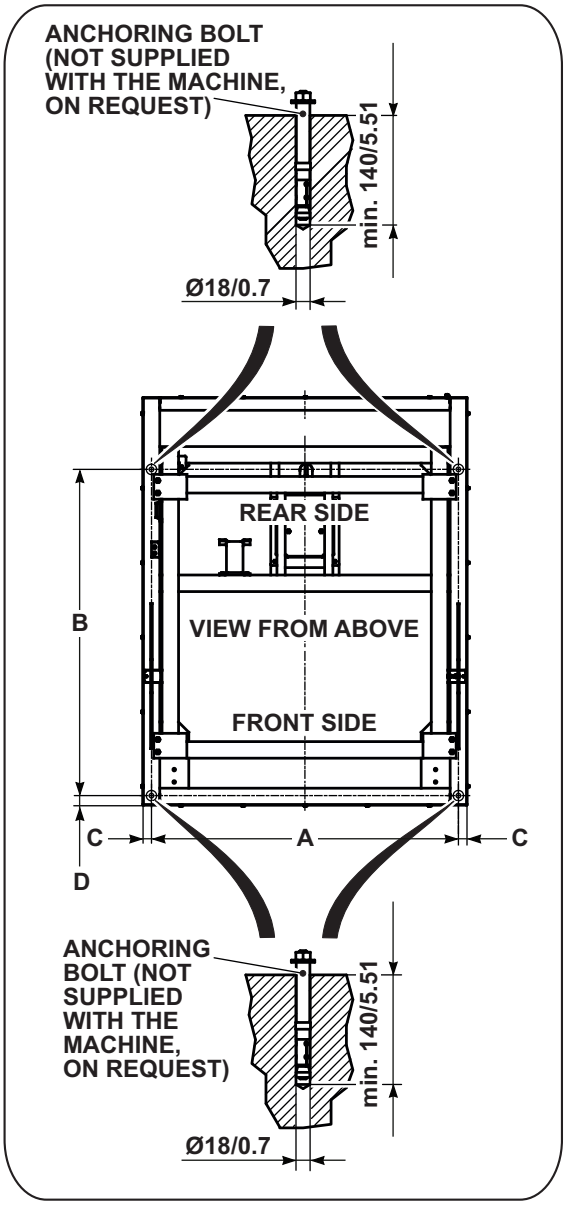


Figure 13

Machine	180/800	230/1000	275/1200
A	1482/58.35	1768/69.61	
B	1575/62.01	1430/56.30	
C	41.5/1.63	41.5/1.63	
D	45.5/1.79	101.5/4	

Table 13

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Connections

Water Connection

The washers are equipped with 3/4 in., 1 in. or 1-1/2 in. BSP (British Standard Pipe Thread) hot and cold water inlet valves, indicated by a sticker next to the inlet. For connection locations, refer to *Figure 2* and *Figure 3*.

NOTE: Water inlet hose with the notches should be connected to the water supply faucet, while the side of the water inlet hose without notches should be connected to the water inlet valves.

Use the water inlet hoses that accompany the washer as they are properly adapted to the water valves and appliance. NEVER use a rigid connection to the water supply.

If using 3/4 in. inlet hoses, there are 2 kinds of water inlet hoses: water inlet hoses with BSP threaded nuts at both sides or BSP threaded nut on one end and a NPT nut on the other end. If a NPT nut is present, it is marked with a groove.

The 1 in. or 1-1/2 in. inlet hoses have BSP threaded nuts on both sides. To connect them to a NPT installation, an adapter is available. For best operation of the washer, it is necessary to keep the water pressure within the limits stated in *Table 1*. Water pressure that is below minimum requirements can lengthen the wash cycle and/or not allow proper function of the washer.

It is also necessary to connect ALL available water inlets to a water supply. If a hard water supply is not present, connect it with soft cold water. If no hot water is present, contact your dealer for the proper required action.

To Install

1. Flush the water system in order to remove any particles that may be in the water system.
2. Install the filter device on the washer, normally delivered with the machine. Connect the filter device to the inlet water hose with appropriate seal washer where necessary.

NOTE: When connecting inlet hoses, be sure hose connections are not cross-threaded on the connection devices.

3. Tighten the hoses securely. DO NOT over tighten as this will damage threads on the device(s).

The water hardness can have an influence on the wash results. The soap supplier can help you with making the right decisions concerning hard water, soft water, washing programs, type of soap and other related items to give the best wash results.

Hot Water

IMPORTANT: Temperature in Washing Tub

The electronic controller uses the temperature sensor in the tub to control the temperature of the washing bath. There are a lot of things that have influence on the temperature measurement. Therefore the temperature control of the washing bath is not very precise.

In principle, the manufacturer strives that the real temperature inside the washer is never higher than the programmed temperature so that textile linen will not be damaged because of too high of temperature. If for certain applications a very precise washing bath temperature is needed, appropriate measures must be taken, see ***Programming Manual***.

The manufacturer will refuse any responsibility for all consequences because of inaccurate temperature inside the washing machine tub.

The hot water supply needs to be large enough to provide the required hot water for the installed washers. For good wash results we advise a hot water supply that is set between 158-176°F/70-80°C.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Water Consumption

The water consumption depends on the programmed values in the controller. These default values can be found in the ***Programming Manual***. For a pre-wash and wash the low water level (LL) is used. The high water level (HL) is used for rinsing. The programmed units correspond to an average amount of water. You can calculate the total water consumption in one washing program by counting up the amount of water by each washing step. Be aware of the fact that these are only indicative values. The values received from this calculation are only an estimation of the real water consumption. The deviation depends on many circumstances. In the wash cycle, for example, there will be a mix of warm water and cold water. The mix of the water depends on the temperature of both. The total amount of water consumed depends also on the loading, type of linen and the drum rotation.

Water Drain Connection

By default 75/335, 90/400 and 125/520 washers are equipped with two drain outlets with an outer dimension of 75 mm (3 in.), while 180/800, 230/1000 and 275/1200 washers are equipped with two drain outlets with an outer diameter of 103 mm (4 in.). The drain outlets are situated on the rear of the machine. The drain has to be connected to the waste channel or pipeline. Seal the connecting point of the drain throat and flexible hose with silicon cement. Secure the elbow or the hose with a clamp. Cover the waste sump with a proper cover.

IMPORTANT: The waste channel must be located lower than the drain outlets because the water discharges from the machines by gravity. Do not reduce the diameter of the machine drain pipes.

The main waste channel or pipeline must have such a capacity that it can take away the drained water from all connected machines at the same time. Ask a corresponding expert (construction technician) to design a sufficiently dimensioned waste pipeline for your washing machines. The correctly designed pipeline is fitted with the main ventilating pipeline (air supply) and possibly an auxiliary ventilating pipeline. This will prevent deceleration of the flow and creation of a high vacuum or overpressure inside the pipeline, causing a breach of the water level in odor closures.

Steam Connection

WARNING

Install a steam supply disconnecting device in the vicinity of each washer. Always disconnect the steam supply before any service or intervention, giving sufficient time to cool down the parts to avoid injuries.

W841

WARNING

It is necessary to insert a filter with permeability up to 300 micrometers in front of the steam valve. Dirt and debris larger than 300 micrometers might damage the steam valve and cause it to leak.

W842

For dimensions of steam connection information, see *Table 1*. Use an inlet steam pressure hose only, adapted to the steam valve with appropriate seal that is suitable for the applied working pressure.

IMPORTANT: Take care while installing and connecting steam supply to prevent accidental contact. Due to the high temperatures, direct injuries will occur.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Venting

WARNING

Vapors escape from the machine through the air vent opening! Do not cover.

W843

The vent air opening is part of the back flow prevention water system. It also makes sure that the tub can not be pressurized by water intake and water vapor. It also allows proper measuring of the water level.

For the safety of everyone make sure that unauthorized persons cannot reach the back side of the machine.

Although it is not advised, you can connect the machine venting pipe to the laundry central duct for exhausting the vapor out of the building. The external diameter of the ventilating opening is 60 mm (2.4 in.) for 75/335, 90/400 and 125/520 models and 40 mm (1.5 in.) for 180/800, 230/1000 and 275/1200 models.

For placing of connection points see *Figure 2*, *Figure 3*, *Figure 6* and *Figure 7*. The piping material must withstand a temperature of 80°C/176°F and generated machine vibrations. The central duct for multiple venting must be dimensioned for the total cross section of venting pipes of all machines. Make sure that this installation can not create any injuries.

Electrical Connection

The machine has been designed for connecting to the power network according the specification of your order. Refer to *Table 14* for electrical specifications. Before connection check the voltage values and the frequency stated in the machine label (see *Figure 2* and *Figure 6*.) to see if they correspond to your power network. An individual branch circuit needs to be used for each machine. The connection is described in *Figure 14*. For electrical protection, a residual current device (RCD) and a circuit breaker must be installed in the electrical installation of the building (laundry switchboard). For correct selection see below in *Residual Current Device (RCD)*.

Electrical specifications								
Model	Voltage Designation					Hot/Cold Water Fill and Steam Heat		
	Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker CSA	CSA AWG (mm^2)
*Y90 (400)	Q	200 - 240	50 - 60	3	3 (L1, L2, L3)	20	30 (32)	10 (6)
	N	440 - 480	50 - 60	3	3 (L1, L2, L3)	12	15 (16)	14 (2.5)
*Y125 (520)	Q	200 - 240	50 - 60	3	3 (L1, L2, L3)	23	30 (32)	10 (6)
	N	440 - 480	50 - 60	3	3 (L1, L2, L3)	14	20 (20)	12 (4)
*Y180 (800)	Q	200 - 240	50 - 60	3	3 (L1, L2, L3)	44	60 (63)	6 (16)
	N	440 - 480	50 - 60	3	3 (L1, L2, L3)	26	40 (40)	8 (10)
*Y230 (10X)	Q	200 - 240	50 - 60	3	3 (L1, L2, L3)	60	80 (80)	4 (25)
	N	440 - 480	50 - 60	3	3 (L1, L2, L3)	35	50 (63)	8 (10)
*Y275 (12X)	Q	200 - 240	50 - 60	3	3 (L1, L2, L3)	74	100 (100)	3 (25)
	N	440 - 480	50 - 60	3	3 (L1, L2, L3)	42	60 (63)	6 (16)

Table 14

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

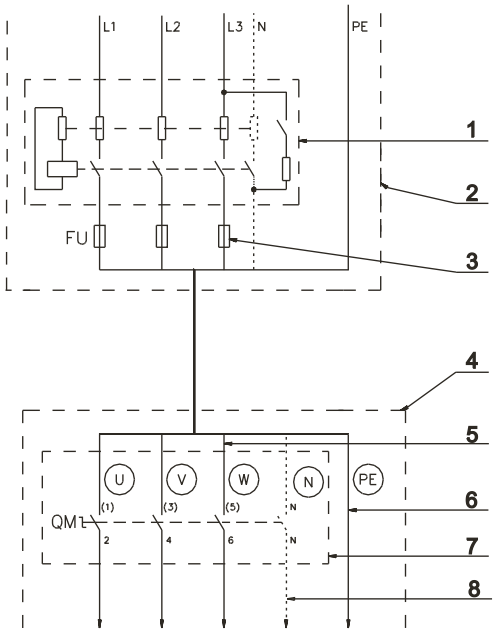
IMPORTANT:

- **If the machine is not equipped with a main switch then supply disconnecting devices need to be provided in the installation for all electrical supplies connected to the machine, in accordance with EN 60204-1 standard, point 5.3.**
- **Make sure the supply voltage is always within the limits specified in *Table 1* in all circumstances. When you have long distances in the electrical installation, it may be necessary to use bigger cables to reduce the voltage drop.**
- **When the machine is connected near a large capacity power supply transformer (500k VA or more, wiring length shorter than 10 m) or there is a power capacitor switch-over, a power supply improving reactor must be installed. If you do not install this, the inverter may get damaged. Contact your sales office for more info.**

WARNING

Grounding: In event of malfunction, breakdown or leakage of current, grounding will reduce the risk of electrical shock and serve as a protecting device, by providing a path of least resistance of electrical current. Therefore, it is very important and the responsibility of the installer to assure the washer is adequately grounded at the point of installation taking into consideration the national and local conditions and requirements.

W844



CFD826N

1	Residual current device (RCD)	**5**	Phase conductors
2	Laundry electrical switchboard	**6**	Protective conductor
3	Supply protection device	**7**	Main switch inlet terminal switchboard
4	Washing machine	**8**	Neutral conductor

Figure 14

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Residual Current Device (RCD)

In some countries an RCD is also known as an “earth leakage trip”, “Ground Fault Circuit Interrupter” (GFCI), an “Appliance Leakage Current Interrupter” (ALCI) or “earth (ground) leakage current breaker”.

Specifications:

- Tripping current: 100mA (if locally not available/ allowed use a 30mA trip current, preferably selective type with small time delay set)
- Install a maximum of 2 machines on each RCD (for 30mA, only 1 machine)
- Type B. There are components inside the machine which make use of DC-voltages and therefor a “type B” RCD is necessary. For information only: Type B is better performance than type A, and type A is better than type AC.

When locally allowed, there must always be an RCD installed. In some power network earthing systems (IT, TN-C,…), an RCD might not be allowed (see also IEC 60364).

The machine control circuits are mostly supplied by a separating transformer. Therefore the RCD may not detect faults in the control circuits (but the fuse(s) of the separating transformer will).

Supply Protection Device

A supply protection device basically protects the machine and wiring against overloads and short circuits. As a supply protection device, you can use either (glow-wire) fuses or (automatic) circuit breakers. See *Table 15* for the rating of the nominal current and other specifications of the supply protection device. In this table it is specified that the protection must be the “slow” type - for circuit breakers which means curve D. Although not recommended, if for some reason you can not use a slow type, select the protection device with 1 step higher nominal current rating to avoid disconnecting during start-up.

Supply Cable

The supply cable is not delivered with the machine.

Specifications:

- The conductors must have copper cores.
- Stranded conductors are strongly recommended (flexible wiring) to avoid conductor breaking because of vibration.
- The cross section depends on the used supply protection device. See *Table 15* for the minimal cross section.
- The cable should be as short as possible, directly from the supply protection device to the machine without branching off.
- No plug or extension cords: The machine is intended to be permanently connected to the electrical network.

Connection:

1. Insert the cable through the hole in the rear panel. Ensure a strain relief (turnbuckle) is used so that the supply cable can not move.
2. Strip the conductor ends according to *Figure 16*.
3. The protective conductor must be longer so that when the cable is pulled out accidentally, this conductor is disconnected last.
4. With stranded conductors, use “wire end tubes” with an insulated sleeve (6) for L1/U, (L2/V), (L3/W), (N) conductors. Make sure there can not be accidental contact, since the supply cable stays under voltage even when the main switch is off.
5. Crimp a ring terminal (eyelet) to the protection conductor for a good connection to the PE terminal.
6. Connect the supply cable conductors to the terminals (main switch (1)) marked with L1/U, (L2/V), (L3/W), (N), and the terminal (copper screw) marked with PE, see *Figure 17*.
7. Provide a sag in the cable, in front of the cable strain relief. This will avoid ingress of condensed water into the machine, see *Figure 17*.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Supply Cable Positioning – Tilt Models Only

The selected power supply cable, *Figure 15* pos. 1, needs to come from above and vertical directed downwards in 1ine with the supply cable entry.

The cable needs to be on 300 mm (11.81 in.) from the back of the machine when the machine is not tilted. Just before entry, a sag of min 50 mm (1.97 in.) and max 150 mm (5.91 in.) must be provided.

From the point of entry, up 1000 mm (39.37 in.) high, no fixation of the supply cable is allowed.

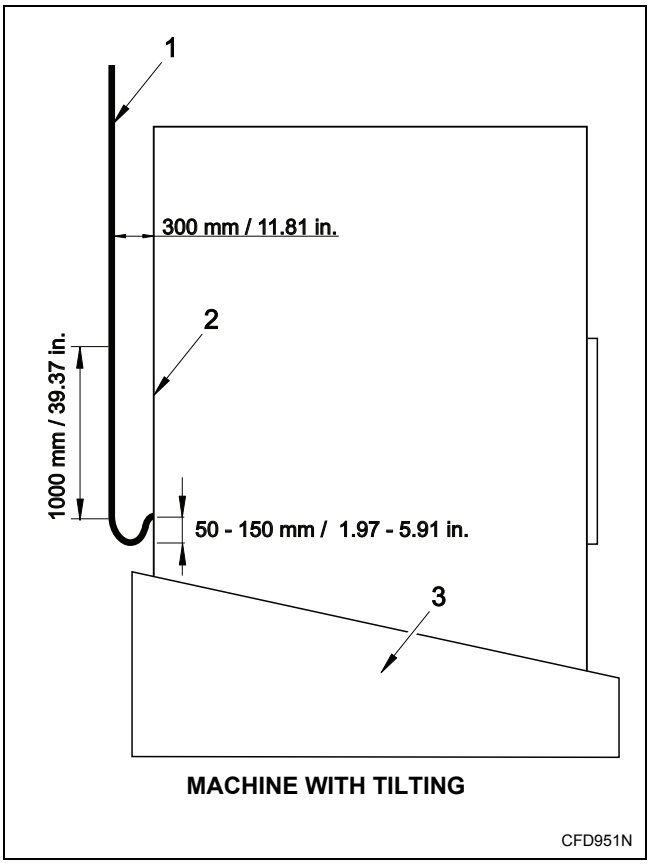
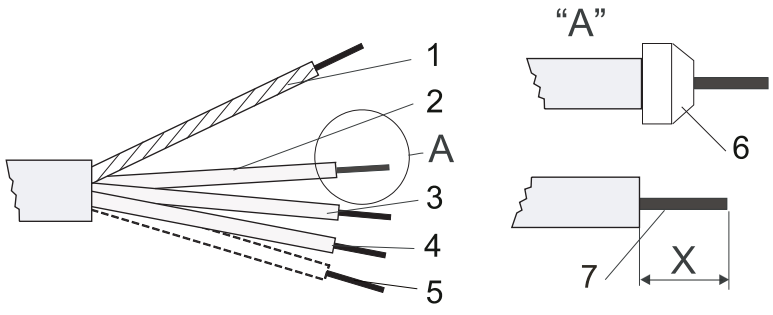


Figure 15

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Power supply protection device nominal current (US)		Min phase conductor section in mm² (AWG)	Min Protection conductor section in mm² (AWG)
Automatic circuit breakers A	**Fuses A**		
16 (15)	10 (10)	1.5 (AWG 15)	1.5 (AWG 15)
20 (20)	16 (15)	2.5 (AWG 13)	2.5 (AWG 13)
25 (-)	20 (20)	4 (AWG 11)	4 (AWG 11)
40 (40)	32 (30)	6 (AWG 9)	6 (AWG 9)
63 (-)	50 (50)	10 (AWG 7)	10 (AWG 7)
80	63	16 (AWG 5)	16 (AWG 5)
100	80	25 (AWG 3)	16 (AWG 5)
125	100	35 (AWG 2)	25 (AWG 3)
160	125	50	35 (AWG 2)
200	160	70	50
250	200	95	70
300	250	120	95

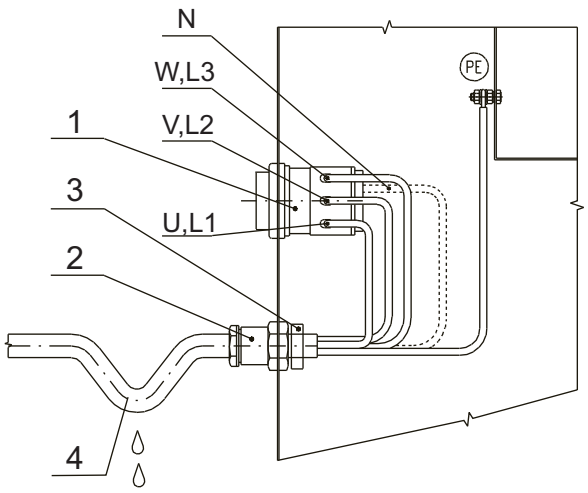
Table 15



1 Protection conductor
2 Phase conductor
3 Phase conductor
4 Phase conductor
5 Neutral conductor
6 Molded tube
7 The stripped length of conductors

Figure 16

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT



CFD828N

1	Main Switch	**3**	-
2	Turnbuckle	**4**	Sag of inlet cable

Figure 17

Washer Protective Earth Connection and Equipotential Bonding

Independent of the supply cable, the washer must be connected to the laundry protective earth system with a separate conductor. The protection conductor, enabling this connection, is not included with the washer. If there are other washers/appliances with exposed conductive parts, which can be touched simultaneously, make sure to make equipotential bonding between all these appliances.

The external protective terminal for this purpose is located on the rear panel of the machine frame. The minimum protection conductor's cross section depends on the supply cable cross section and can be found in *Table 15*. However, for the protection purposes with the supply cable section of min. 4 mm², we recommend to select a larger conductor section, i.e. 6 mm².

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Liquid Soap Connection

Connection point for soap supply. See *Figure 2*, *Figure 3*, *Figure 6* and *Figure 7*.

NOTE: Always use liquid soap pumps that have a flow rate high enough to bring the requested quantity into the washer in less than 30 seconds.

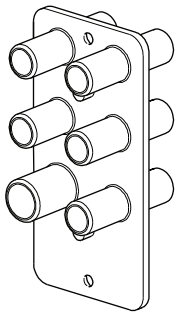
IMPORTANT: Start pumping immediately after the water valves are open. The incoming water dilutes the liquid soap and brings it into the tub assembly.

CAUTION: Secure the location of the wiring and hoses in such a way that they can not be pinched, damaged or rubbed. Only authorized workers, with a valid qualification, should do the installation. Before you start to use liquid soap, check with your liquid soap supplier whether the liquid soap is harmless and inert to HD-PPE and PVC material in order to avoid a problem that the manufacturer is not responsible for.

For 75/335, 90/400 and 125/520 models, six liquid soar dispensers are provided. Refer to *Figure 18*. The 8 mm (.315 in.) connectors should be used for liquid soap, while the 12 mm (.5 in.) connector should be used for diluted soap. The connectors must be drilled out and opened before the liquid soap hoses are connected to them.

NOTE: Only open the connectors that will have an attached hose.

Refer to *Figure 19* for the 180/800, 230/1000 and 275/1200 liquid soap connection details.

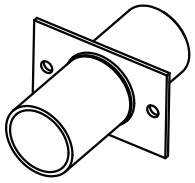


Hose Connections -
Models 40/100, 55/125, 75/335, 900/400 and 125/520

CFD965N

Figure 18

Refer to *Figure 19* for the 180/800, 230/1000 and 275/1200 liquid soap connection.



Hose Connection -
Models 180/800, 230/1000 and 275/1200

CFD831N

Figure 19

WARNING

Check that the hose connections are tight (check the clamps)! Any leakage of chemicals may cause serious bodily injuries as well as serious damage to the washer. If one of the nipples are open, close and secure the opening with an appropriate cover.

W845

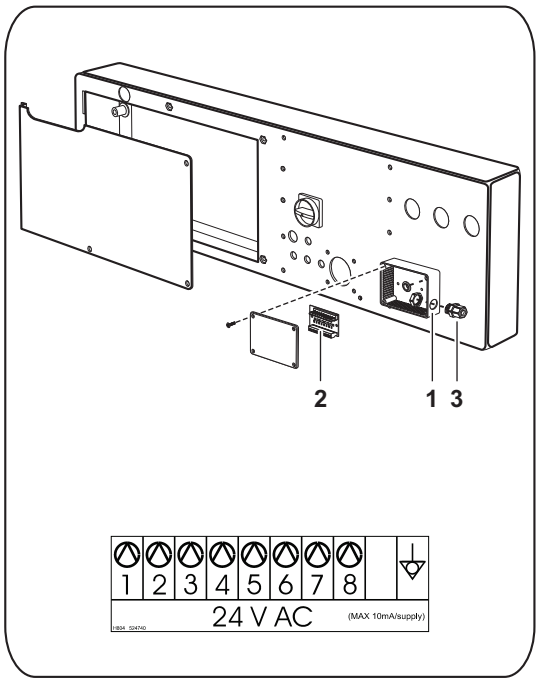
© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Electrical Connection

The power supply of the liquid soap pump system has to be connected to an external electrical source. Only authorized workers with a valid qualification must execute the electrical connection on the machine according to the valid local standards. The correct connection way can be found on the wiring diagram that is located inside the cabinet in a plastic bag. Do not connect the liquid soap pump system in the washer.

Electronic Controller with Blue PCB and Graphical Display

For electric connection of supply control signals, a plastic box is available on the back side of the machine with a terminal box that shows an LED signal when each respective pump is activated. Under the terminal box, there is a label for electric connection. Detailed signal connections can also be found on the electric scheme of the machine. Refer to *Figure 20* for 75/335, 90/400 and 125/520 models and to *Figure 21* for 180/800, 230/1000 and 275/1200 models.

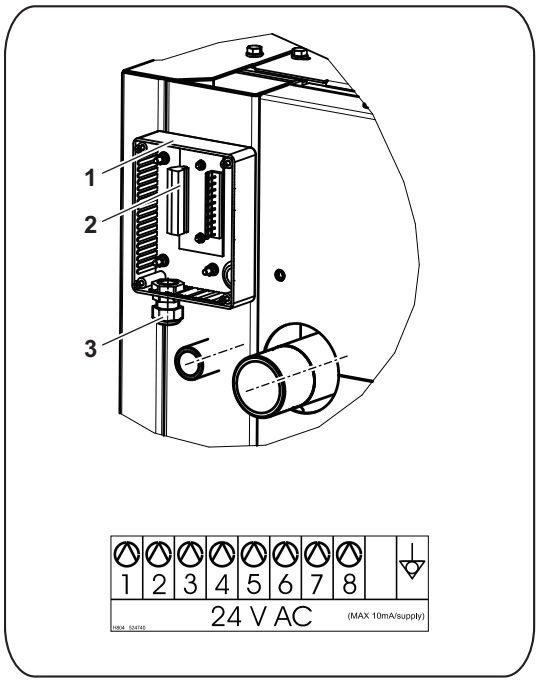


CFD966N

Electrical Connection Label-
Models 75/335, 90/400 and 125/520

1 Plastic Box
2 Terminal Box
3 Plastic Cable Bushing

Figure 20



CFD952N

Electrical Connection Label-
Models 180/800, 230/1000 and 275/1200

1 Plastic Box
2 Terminal Box
3 Plastic Cable Bushing

Figure 21

Signals for supply pumps control are 24 VAC. Maximum current for control circuits of pumps must be limited to 10mA. Lead the pump control signal cable through the plastic cable bushing. After connection of conductors to the respective positions of the connector “P” (screw clamps), fix up the cable by tightening the cable bushing to prevent it from disconnecting and close the box with the cover. For details about liquid soap supply system programming, see ***Programming Manual***.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Putting the Machine into Service

Models 75/335, 90/400 and 125/520

Before you put the machine into operation, remove the three striking color transport braces securing the vibrating machine components during transport. Refer to *Figure 22*. One brace (pos.1) is located in the front part of the machine, accessible after removal of the front lower cover. The two braces (pos. 2) are placed in the rear machine part, accessible after removal of the case cover. After removal of the braces, mount the covers back to their places.

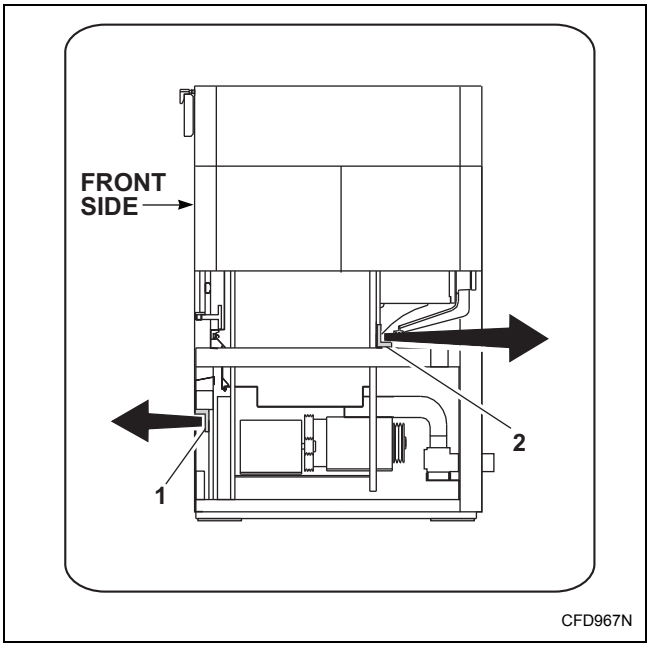


Figure 22

Models 90/400 and 125/520 with Tilt Option

Once the transport braces are removed, place two backstops supplied with the machine in their places. Refer to *Figure 23*. These backstops secure the machine when it is being tilted. When the braces are removed and backstops attached, put the guards back.

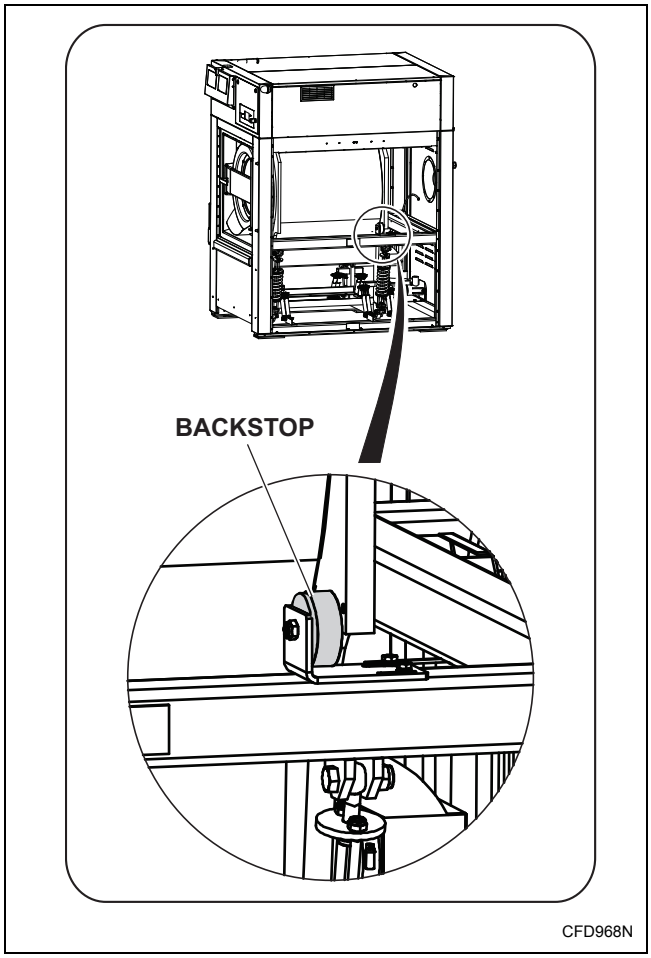


Figure 23

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Models 180/800, 230/1000 and 275/1200

Before you put the machine into operation, remove the six striking color transport braces securing the vibrating machine components during transport. The three braces are placed on the left side of the machine and three braces are placed on the right side of the machine, accessible after removal of the side covers. After removal of the braces, mount the covers back to their places. Refer to *Figure 24*.

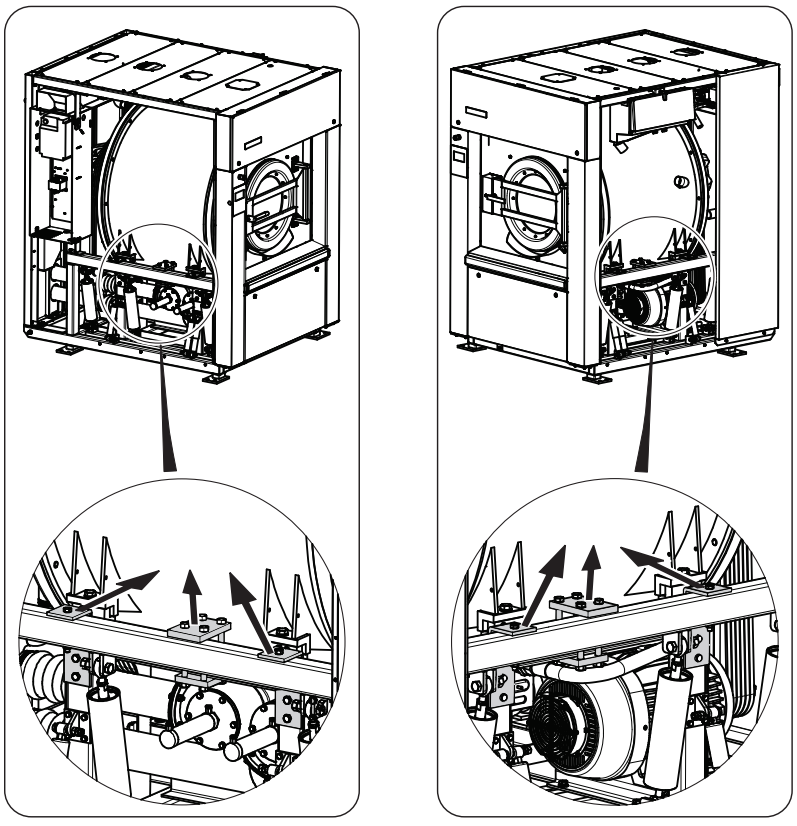
WARNING

The transport braces must be removed prior to putting your machine into service, otherwise your washing machine can be seriously damaged!

W846

Checking Before Putting into Service

1. Check that the transport braces are removed.
2. Make sure the cabinet protective foil is removed.
3. Check if the waste sump is ready for water drainage.
4. Check the protective connection (earth connection) - “PE” or “PEN”.
5. Carefully read the operation manual before the machine start and following the instructions stated.
6. Check the drum rotation direction during extracting. For 75/335, 90/400 and 125/520 models, the drum rotation should be counter-clockwise during extraction while facing the front of the machine. For 180/800, 230/1000 and 275/1200 models, the drum rotation should be clockwise during extraction while facing the front of the machine.
7. Check that the vibration switch function and the emergency function is operating properly during extracting.



CFD953N

Figure 24

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Operation

Symbols on the Machine

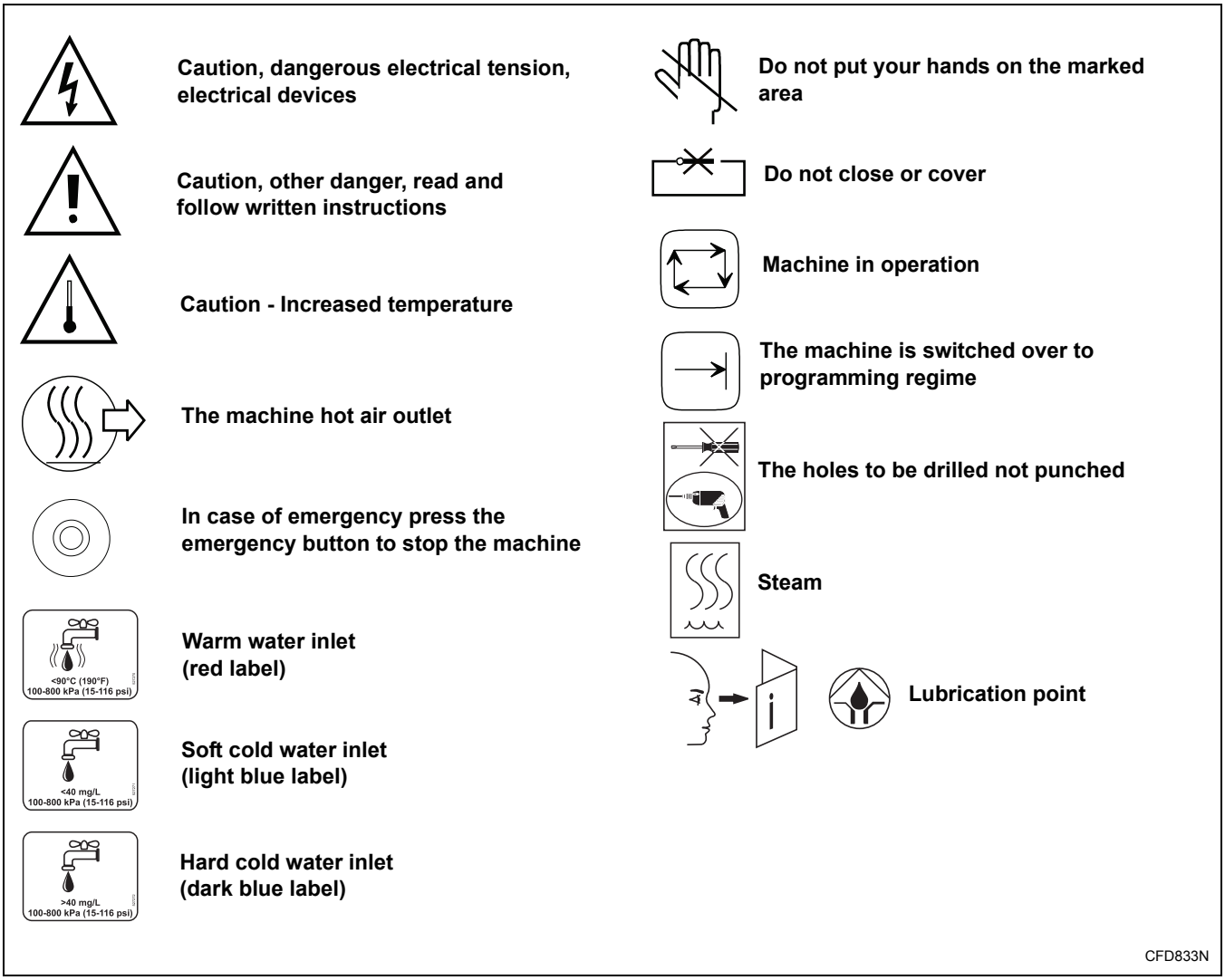
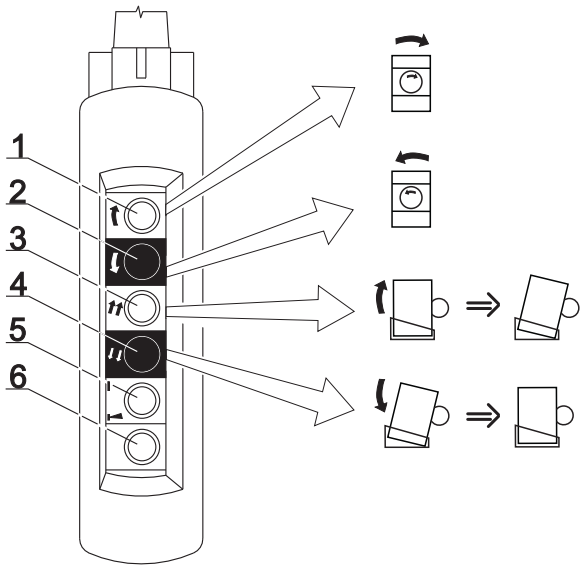


Figure 25

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Hanging Control (Washers with Tilting System)



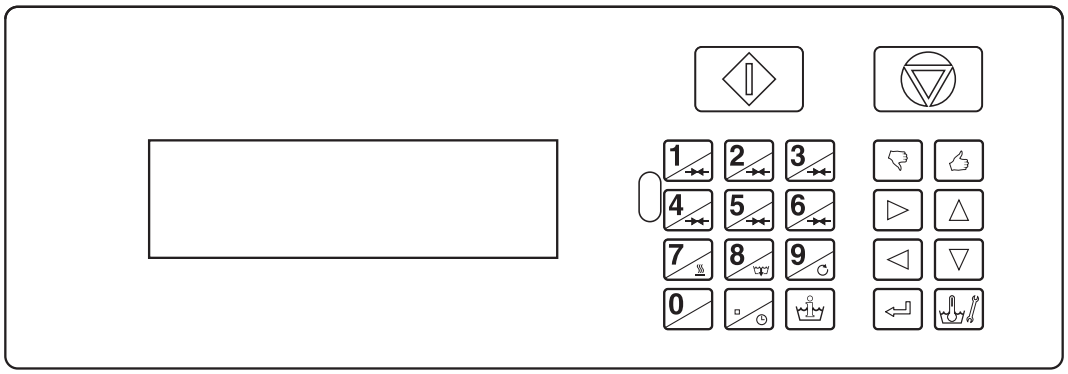
CFD944N

1	Button for drum rotating, direction of rotating is clockwise from the front view.	**4**	Button for tilting, direction of tilting is backward to basic position.
2	Button for drum rotating, direction of rotating is counter clockwise from front view.	**5**	Button for permission of washer tilting - two-hand control.
3	Button for tilting, direction of tilting is forward to unload.	**6**	Button for permission of drum rotation - two-hand control.

Figure 26

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Micro Microprocessor



CFD1437R

Figure 27

START (advancing program)

STOP (interrupting program)

YES SELECTION

NO SELECTION

INCREASING SEQUENCE TIME

DECREASING SEQUENCE TIME

INFO (overview available wash programs and wash sequence functions)

SERVIS (shows actual water temperature and level, number of fulfilled cycles and actual states

ACTIVATES THE TIME DELAY FUNCTION (delay time will be started by pressing start)

OPENING THE INLET VALVES

ACTIVATE HEATING

OPEN DRAIN VALVE

SPEED ADJUST

ENTER - SELECTION OR CONFIRMATION

CFD835N

Figure 28

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Before Washing

Sort the linen according to temperature and instructions determined by fabric manufacturer. Check laundry for strange objects like nails, screw, needles, etc., to prevent washer-extractor or linen damage. Turn sleeves of shirts, blouses, etc., inside out. To get a better washing result, mix the bigger and smaller pieces of linen and put them into the washer separately.

Opening the Door

Turn the handle down.

For models equipped with the tilt option, open and secure the door. Refer to *Figure 6*.

When the door is opened, the tilting function is enabled. The buttons on the hanging control can now be used.

NOTE: The tilting function is disabled when the door is closed.

WARNING

When using the tilting control to tilt the machine, always stand on the side of the machine. Do not stand in front or behind the moving machine!

W847

Loading the Machine with Linen

Do not overload the washer extractor. Overloading the machine can lead to a bad wash result. Half washing loads can obstruct proper functioning.

Closing the Door

WARNING

Never put fingers between the door sealing and drum to avoid possible injury!

W848

Turn the handle up.

Before start up, make sure the door is properly latched.

For models equipped with the tilt option, a program cannot be selected if the machine is not in the basic position. If the machine's door is closed before the machine reaches the basic position, a warning will be shown on the control's display. When the warning is shown, close the door and move the machine to the basic position.

Program Selection

Choose one of the available wash programs, best corresponding to the quality of linen and allowed wash temperature in the wash load. Selection of the program determines temperature and time for washing and rinsing.

NOTE: To change factory settings and/or washing programs and for other settings options - see *Programming Manual*.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Wash Programs Overview

Wash program 1:	Hot wash	90°C/194°F	
Wash program 2:	Warm wash	60°C/140°F	
Wash program 3:	Colored wash	40°C/104°F	
Wash program 4:	Bright colored wash	30°C/86°F	
Wash program 5:	Woolens	15°C/59°F	
Wash program 6:	Hot wash	90°C/194°F	ECONOMY level
Wash program 7:	Warm wash	60°C/140°F	ECONOMY level
Wash program 8:	Colored wash	40°C/104°F	ECONOMY level
Wash program 9:	Bright colored wash	30°C/86°F	ECONOMY level
Wash program 10:	Hot wash	90°C/194°F	SUPER ECONOMY level
Wash program 11:	Warm wash	60°C/140°F	SUPER ECONOMY level
Wash program 12:	Colored wash	40°C/104°F	SUPER ECONOMY level
Wash program 13:	Bright colored wash	30°C/86°F	SUPER ECONOMY level
Wash program 14:	Extraction		low speed
Wash program 15:	Extraction		high speed

Table 16

Add Detergent

Fill the soap dispenser at the front or side of the washer extractor depending on the chosen program.

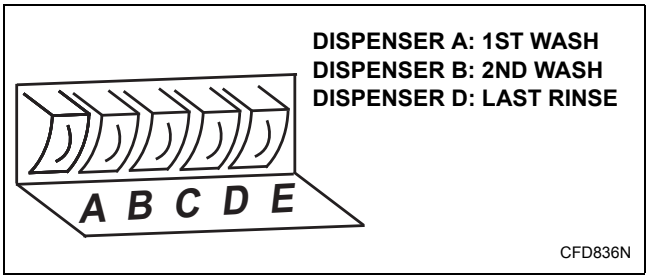


Figure 29

Add the detergents before the start of the wash cycle.

For washing machines connected to a liquid soap supply system:

Check if the liquid soap supply system is in operation and if there is sufficient quantity of liquid soap.

For standard wash programs versus custom made wash programs:

This explanation is only valid for standard wash programs. For custom made programs, it is possible that other dispensers have been selected.
(See ***Programming Manual***.)

NOTE: If it advisable to use only detergents with "reduced foaming" which can easily be found in retail shops. The dosage of soap to use is generally mentioned on the packaging. An overdose of detergent can lead to poor wash results and "suds" overflow which can damage the machine.

Make sure that the lid of the soap dispenser is closed when the machine starts.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Start the Washer

Micro Microprocessor

After selecting the desired wash program number, pressing the **START** button will start the wash cycle. If there is no washing program available for the selected program number, “INVALID” will be displayed.

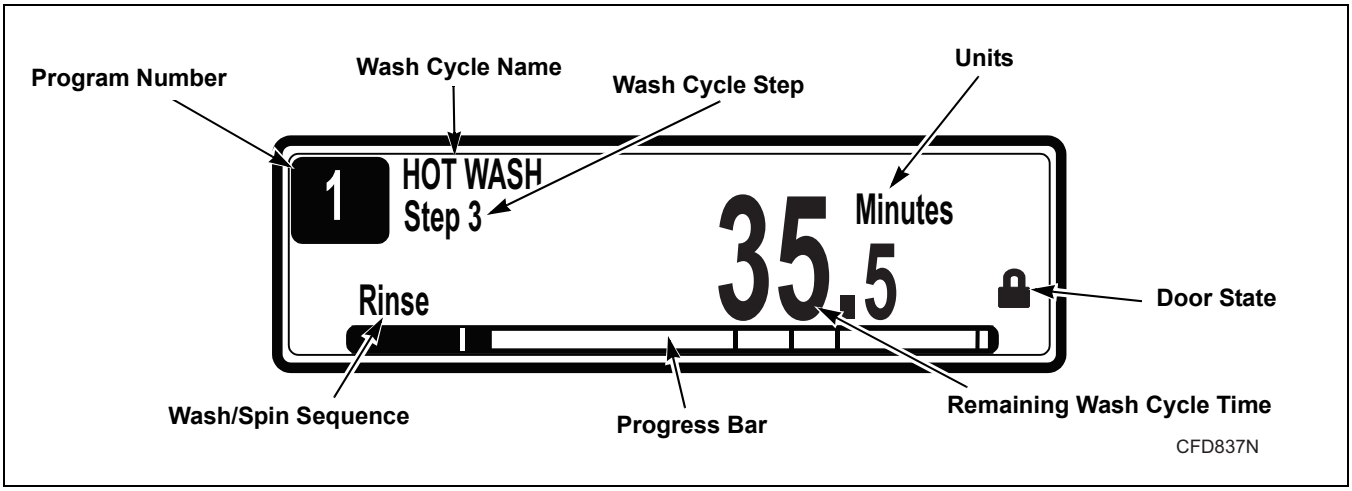


Figure 30

WARNING

If “Close Door” is displayed, it is not possible to start the washing cycle. Check whether:
- **the machine is in the basic position**
- **the drum door is closed**

W849

End of Wash Cycle

WARNING

When the power supply has been cut, the door will be automatically blocked against opening. After cooling down the washing bath, the door can be opened according to the machine maintenance instructions.

W850

At the end of the wash cycle, when the remaining program time reaches “0”, “PROGRAM END” is displayed. When “UNLOAD” appears on the display, open the door by the door handle and take the garments out of the washer extractor.

Models with the Tilt Option - Tilting the Machine Forward to a Position Suitable for Unloading the Linen

For models equipped with the tilt option, open and secure the door. Refer to *Figure 6*. The machine may now be tilted forward as desired, up to the extreme forward position. Please note that it is not required to tilt the machine all of the way forward. To tilt the machine forward, press and hold the hanging control's buttons 3 and 5. Refer to *Figure 26*. Tilting will begin after the buttons are held for approximately 10 seconds. When the machine has tilted forward all of the way, the tilting will stop automatically.

NOTE: Tilting is possible only when the drum door is open.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Models with the Tilt Option - Unloading the Linen

WARNING

During unloading while the drum is rotating, do not stand in front of the machine. The linen comes out of the machine by itself. Do not pull the linen out while the drum is rotating.

W851

To make unloading the linen easier, use the drum rotation function. To make the drum rotate in the tilted position, press and hold the button for drum rotating in the required direction (*Figure 26*, pos. 1 or 2) and the green button (6) on the controller at the same time. This will make it easier to unload the linen.

It is possible to unload the linen in just a few steps: tilt the machine and unload the linen using the drum rotation function. Then, tilt the machine more and repeat the drum rotation.

Models with the Tilt Option - Tilting the Machine to the Basic Position

After unloading the linen, tilt the machine back to the starting position by pressing and holding the hanging control's buttons 4 and 5. Refer to *Figure 26*. Tilting will begin after the buttons are held for approximately 10 seconds. When the machine has returned to the basic position, the tilting will stop automatically.

NOTE: When the power supply is interrupted during tilting, the machine remains secured in the current position both during and after the power supply restart.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Maintenance

WARNING

Always follow safety instructions! Do not bypass any safety devices or their parts. Any interference to the machine functions and construction are prohibited! Use the proper chemical agents which avoid calcium sediments on heating elements and other machine parts. Discuss this issue with your supplier of washing products. The manufacturer of the machine is not responsible for the damage of heating elements and other machine parts due to calcium sediments.

To avoid injuries:

- **Do not operate the machine with broken/ missing parts or opened covers!**
- **Before maintenance work, disconnect the machine power supply!**
- **When the main switch is turned off, the inlet terminals of the machine main switch are still under current!**

W852

When replacing any parts of the machine, replace them with original parts obtained from your dealer or ordered through the spare parts manual.

Introduction

Due to the quality construction and reliable parts and materials of the machine, the preventative maintenance has been limited to a minimum of steps.

While the machine is still under warranty, call your dealer to perform the monthly, 3 month and 6 month procedures listed below to avoid warranty cancellation.

Daily

Perform daily:

1. Water and steam inlets for leakage.
2. Drain valve for leakage during washing process and for proper opening (the valve is in the open position without electric current).
3. Clean the machine cabinet to remove any traces of washing soaps.
4. Soap hoppers must be cleaned at the end of each working day.
5. Clean up the door gaskets to remove sediments and dirt.

IMPORTANT: Do not use solvents or acids to clean the rubber door gasket!

IMPORTANT: Do not use oil or grease on rubber!

After the machine has been cleaned up, leave the door open to provide venting to the machine and to prolong the life of the door gasket. We recommend shutting off all main inlets of electric power and steam (the laundry main valves and switches).

Monthly or After 200 Working Hours

1. Lubricate according to *Lubrication*.
2. Check for leaks on external liquid soap supply system.

IMPORTANT: Check all hose joints, screw joints and connections on the external liquid soap system to make sure it is leak-proof.

Every 3 Months or After 500 Working Hours

1. Check the bearing house for leaks.
2. Make sure the machine is disconnected from main power supply by the laundry switch or circuit breaker, and that the other workers are well informed about the machine maintenance activity.
3. Check the tightness of the bolts.
4. Visually inspect the pipes and hose connections inside the machine for leakage.
5. Make sure that the control components are protected against moisture and dust during clean up. Wipe and clean the machine inside.
6. Lubricate according to *Lubrication*.
7. On machines with electric heating, check the tightness of the heating element terminal contacts and other power terminals (main switch, fuse disconnectors, contactor, etc.).
8. Put the covers back and switch on the power supply by the main laundry switch or circuit breaker.
9. If there is an earth leakage trip installed in the inlet circuit of the laundry electric switch board, test it according to *Earth Leakage Trips*.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Every 6 Months or After 1000 Working Hours

1. Clean the steam inlet filters according to *Steam Filters*.
2. Remove the rear machine cover and check the condition and tightness of the V-belts (*Driving Mechanism*).

WARNING

Before removing top or back panel of the machine, switch power off and wait for at least 10 minutes. Before starting inspection of the frequency inverter, check for residual voltage across main circuit terminals + and -. This voltage must be below 30 VDC before you can access the inverter for inspection.

W853

3. Clean and remove dirt and dust from:
   - the cooling fan of the inverter
   - the motor cooling fans
   - the internal ventilator of the inverter (if present)
   - the external ventilator (if present)
   - the external air relieves of the machine
   - check if ventilator in cooling fans of inverter (if present) is functional
   - check if external ventilator (if present) is functional

Safety Vibration Switch

Function Description - Models 75/335, 90/400 and 125/520

The unit contains the vibration switch (*Figure 32*, pews. 5) with a flexible controlling element which is attached to a holder (7) by nuts (6) and this entire assembly is bolted to the bottom of the switchboard (4). The switch controlling element is inserted into the rubber bushing (3) located into the limiter (2) which is bolted to the drum front face (1). The switch attached to the switchboard is a part of the machine skeleton which is attached to the frame and the limiter with the bushing is a part of the assembly that vibrates. The vibration switch sensibility is given by a mutual adjusting of these two components which controls the unbalance level of linen in the drum.

Function Description - Models 180/800, 230/1000 and 275/1200

The vibration Switch is an important safety element which must – if correctly adjusted – stop the machine if excessive vibration and shaking occurs due to an unbalance caused by improper distribution of linen in the washing drum. Because this component is very important, it is recommended that at the first installation and then once in a year the vibration switch is verified by a qualified worker.

The unit contains the vibration switch (*Figure 33*, pews. 4) with a flexible controlling element, which is attached to a holder (6) by nuts (5) and the entire assembly is bolted to the rigid machine frame (3). The switch controlling element is inserted into the limiters (2) which is bolted to the front part of moving frame (1). The limiters are a part of the assembly that vibrates. The vibration switch sensibility is given by a mutual adjusting of these two components which controls the unbalance level of linen in the drum.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Sensibility Adjustment - Models 75/335, 90/400 and 125/520

1. By moving limiter (*Figure 32*, pews. 2) up or down (direction A), you will adjust the center of rubber bushing to the control element axis of vibration switch.
2. By moving the vibration switch on the holder (7) to the left, you will increase the sensibility and to the right you decrease it (direction B). To reach the maximum permitted unbalance value it is necessary to keep the distance of 100 mm (3.93 in.) between the limiter (2) and the vibration switch (5) - see the side view.

Moving the holder (7) with the switch left or right (direction C) you will center the switch control element in the rubber bushing of the liner.

Sensibility Adjustment - Models 180/800, 230/1000 and 275/1200

1. Set a distance of 12 mm (0.47 inches) between the limiters (2).
2. By moving the vibration switch (4) on the holder (6) to the left, you will decrease the sensibility and to the right you increase it (direction A). To reach the maximum permitted unbalance value, it is necessary to keep the distance of 60 mm (2.36 inches) between the limiters (2) and the vibration switch (4).
3. Moving the holder (6) with the switch left or right (direction B) you will center the switch control element to the distance axis between the limiters (2).

Verifying the Function

Verify the function as follows:

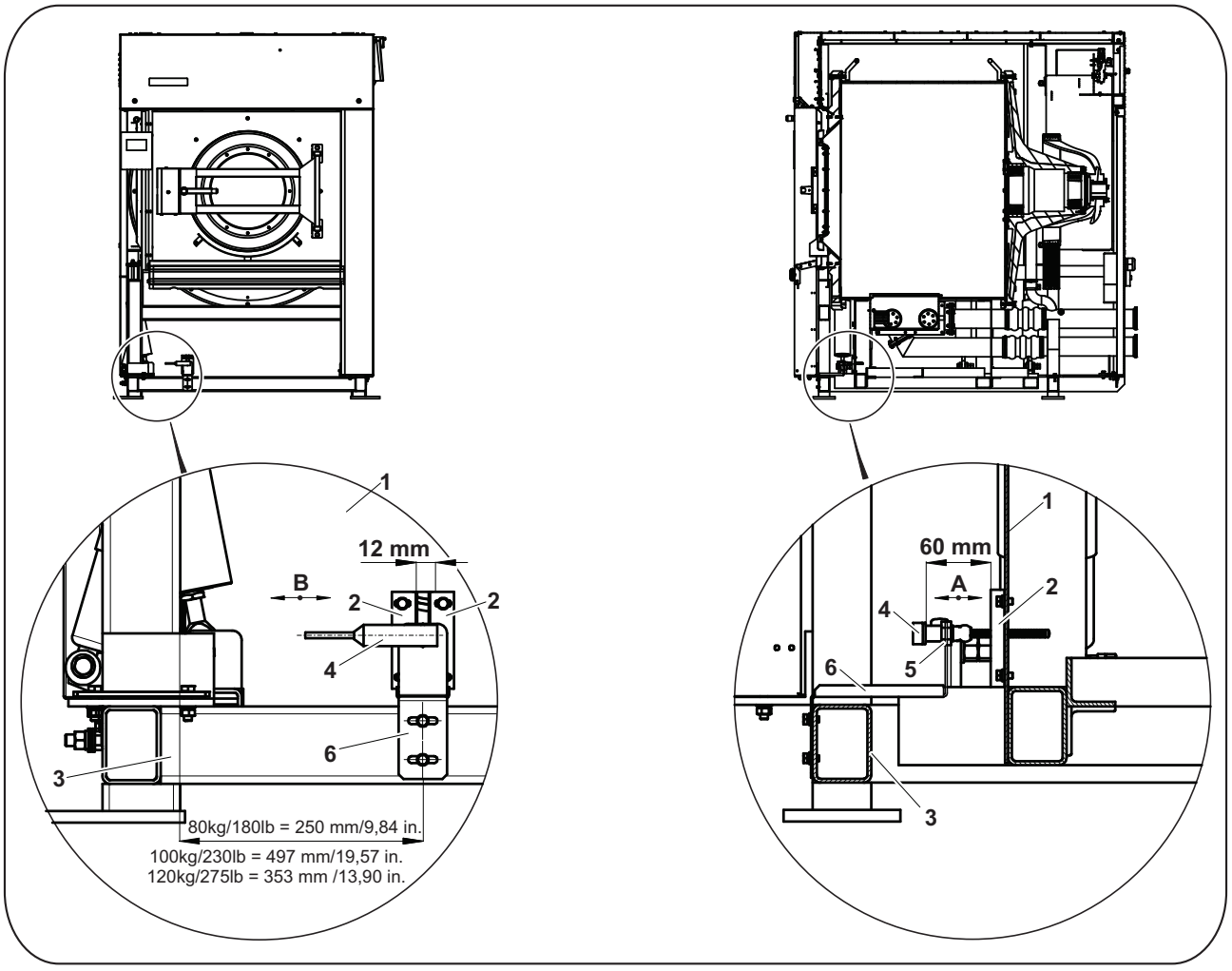
1. Open the control panel cover.
2. Start extraction mode.
3. After reaching the maximum RPM, carefully switch over the vibration switch by moving the flexible control element manually.

WARNING

Do this carefully to avoid injuries by moving and non-moving parts of the machine! After you have checked the function, mount all panel covers back to their original places.

W854

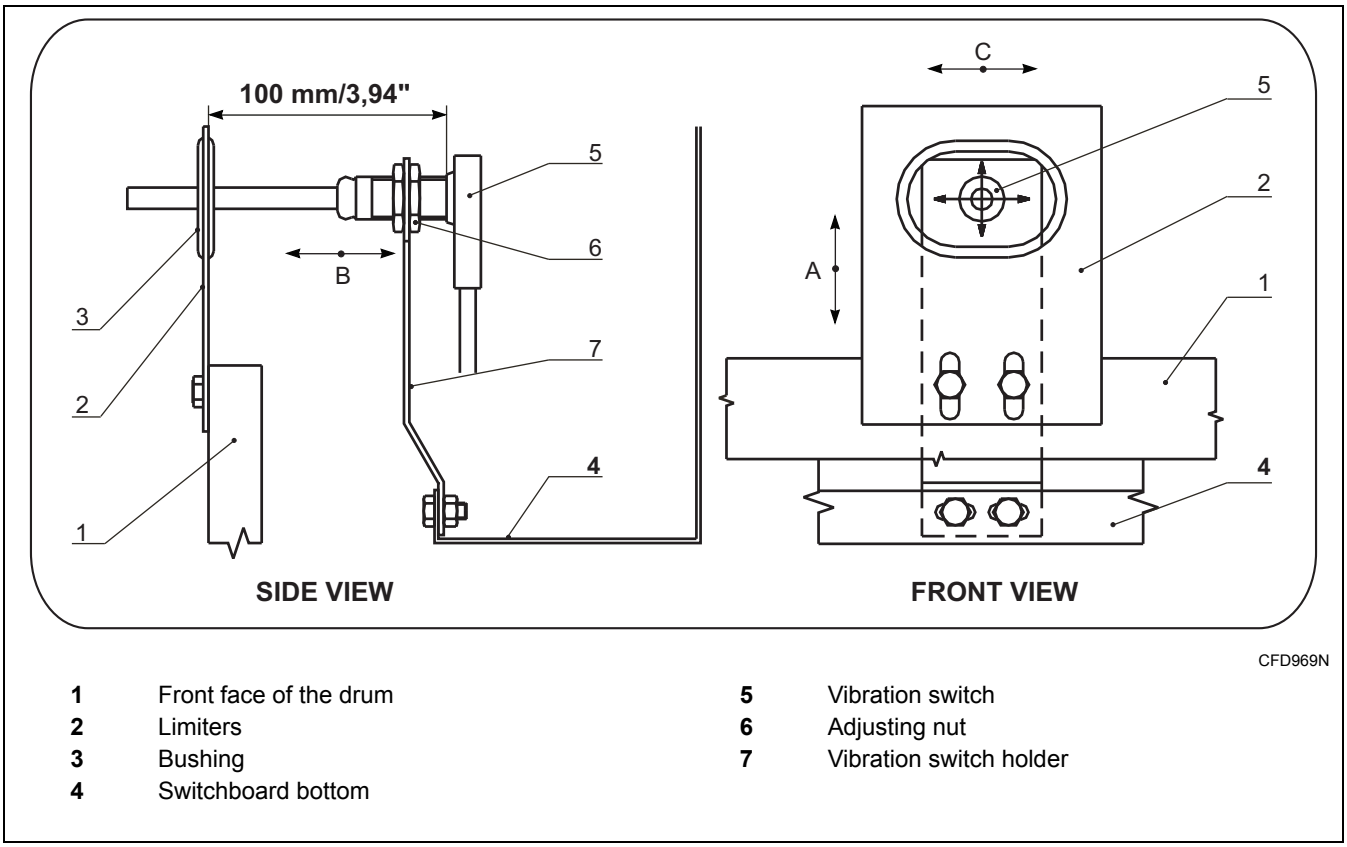
© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT



1	Front part of moving frame	**4**	Vibration switch
2	Limiters	**5**	Adjusting nut
3	Machine frame	**6**	Vibration switch holder

Figure 31

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT



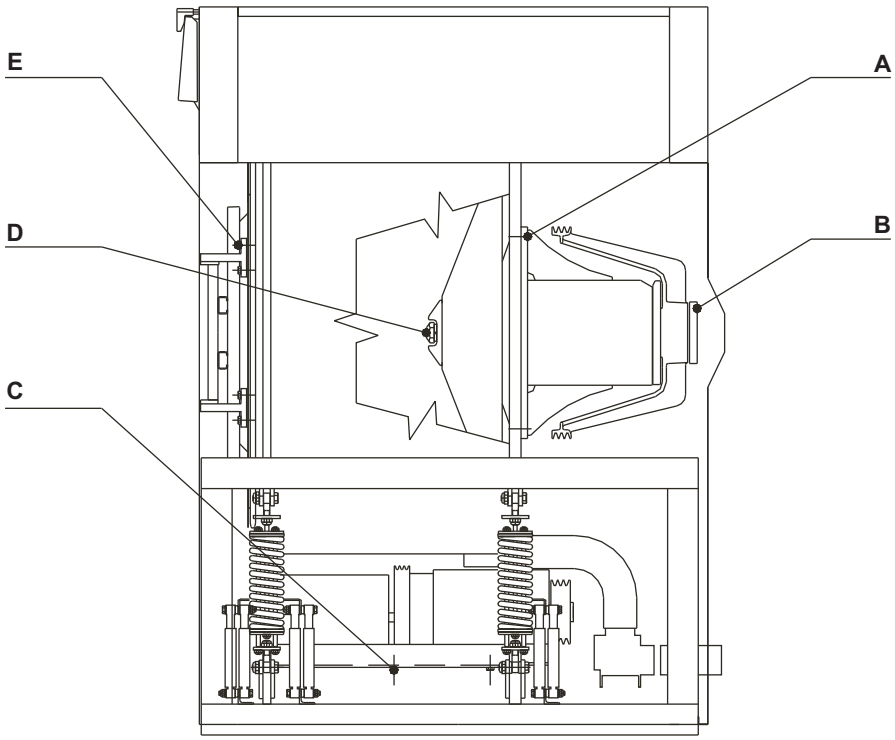
1	Front face of the drum	**5**	Vibration switch
2	Limiters	**6**	Adjusting nut
3	Bushing	**7**	Vibration switch holder
4	Switchboard bottom		

Figure 32

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Torque Specifications - 75/335, 90/400 and 125/520 Models					
Bolt (Nut)	**Models**	**Dimension**	**Amount**	**Tightening Moment (Nm)**	**Tightening Moment (lb. ft.)**
A	75 / 335, 90 / 400 and 125 / 520	M20x65	24	600	443
B	75 / 335, 90 / 400 and 125 / 520	M12x30	8	70	52
	75 / 335	KM13	1	450	332
C	75 / 335, 90 / 400 and 125 / 520	M12x35	6	70	52
D	75 / 335, 90 / 400 and 125 / 520	M30x80	1	800	590
E	75 / 335, 90 / 400 and 125 / 520	M12x38	4	25	18.5

Table 17



A Bolts of Hub flange
B Bolts fixing the pulley to the nut of clamping sleeve
C Bolts fixing the motor plate to the external drum
D Bolts fixing the inner drum to the shaft
E Bolts fixing the door brackets

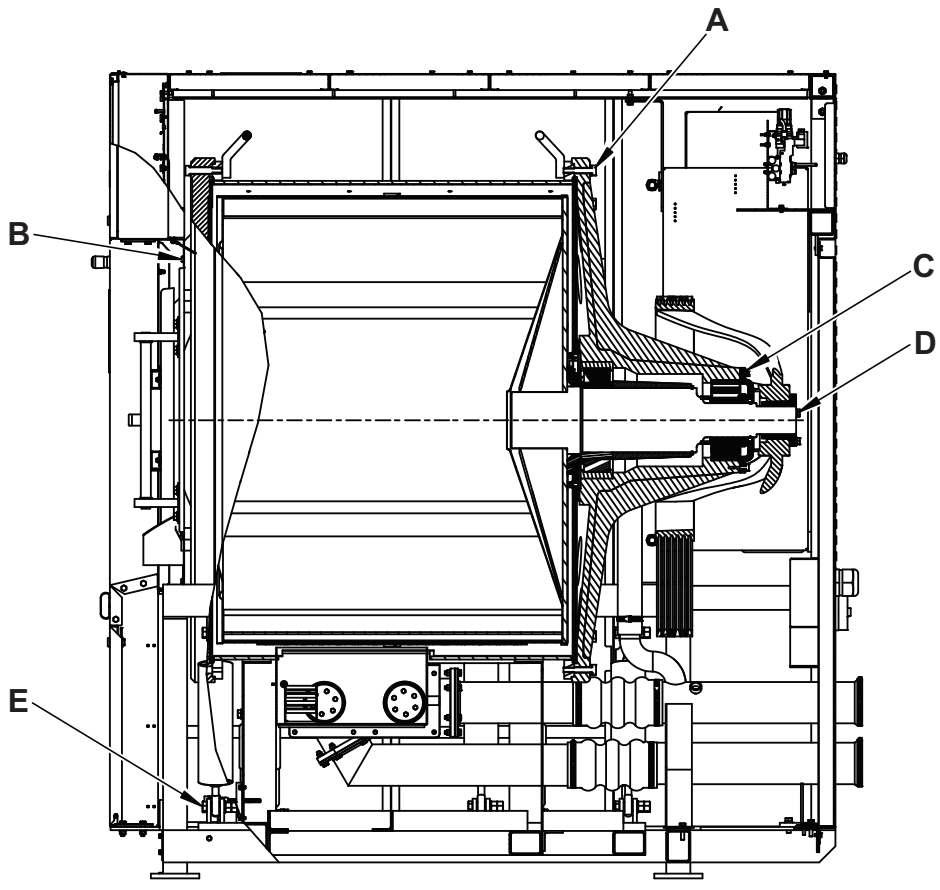
A spanner for the jam nut KM 13 is not a part of the delivery or accessories.

Figure 33

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Torque Specifications - 180/800, 230/1000 and 275/1200 Models						
Bolt (Nut)	**Models**	**Dimension**	**Amount**	**Tightening Moment (Nm)**	**Tightening Moment (lb. ft.)**	**Bolt Type**
A	180 / 800	M16x70	24	200	148	8.8
	230 / 1000	M20x70	24	350	258	8.8
	275 / 1200		32	350	258	8.8
B	180 / 800	M10x60	7	20	15	A2
	230 / 1000 and 275 / 1200		7			
C	180 / 800 and 230 / 1000	M10x30	8	20	15	4.8
	275 / 1200	M12x30	8	36	27	4.8
D	180 / 800	M10x60	4	44	32	8.8
	230 / 1000 and 275 / 1200	M10x60	6	44	32	8.8
E	180 / 800, 230 / 1000 and 275 / 1200	M16x75	12	88	65	4.8

Table 18



A Hub flange bolts
B Bolts fixing the door hinges
C Bolts fixing the bearing house cover
D Bolts fixing the pulley to the nut of clamping sleeve
E Bolts fixing the spring nut

Figure 34

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Lubrication

WARNING

Do the lubrication work only when the main switch is off and all components have been stopped (if not stated otherwise in following instruction)!

W855

Every time you use a grease gun, especially for greasing bearings and seals, do it slowly - not faster than 5 strokes in 1 minute. The grease gun can create a high pressure which can cause seal deformation and consequent leakage. Never operate the grease gun faster even if the grease contains air gaps.

Over-lubrication can cause the same damage as insufficient lubrication.

Always make sure that your grease gun is in perfect condition.

If you substitute the lubricant by another type make sure that these two kinds are compatible, otherwise there is a risk of bearing failure. For example, lithium lubricants are compatible with calcareous lubricants but not with sodium ones.

IMPORTANT: Never mix petroleum lubricants with silicone lubricants!

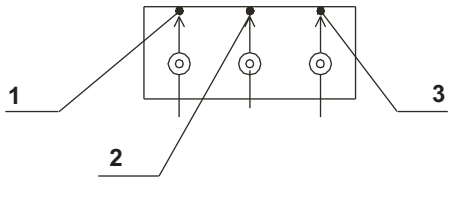
Lubrication Points, Quantity and Lubrication Periods - Models 75/335, 90/400 and 125/520

Lubricant

Use a multipurpose lithium lubricant containing high-pressure additives of consistency NLGI 2.
SKF - LGEP 2
ESSO - BEACON EP 2

Lubricators

For main bearings and seals, lubricators are located on the rear machine cabinet and marked by the symbol "Lubrication point". Refer to *Figure 35*. Lubricators can also be marked by text "Lubrication". Press the lubricant in slowly and let the drum rotate with the same speed as during washing.



1	Rubber seal lubricator
2	Front bearing lubricator
3	Rear bearing lubricator

Figure 35

Quantity of Lubricant

2 cm³ (2 strokes) - once in a month or every 200 working hours, which ever comes first.

Lubrication Points, Quantity and Lubrication Periods - Models 180/800, 230/1000 and 275/1200

Once in 6 months or when needed, grease spring suspension eyes (*Figure 42*, pos. 4), guiding rods (pos. 5), the door handle casing (*Figure 39*, pos. 2) and the casings in the door hinge (*Figure 39*, pos. 7). The motor bearings are maintenance-free (do not lubricate).

The hubs of machines are maintenance-free.

Pneumatic Lubricator

Fill the lubricator pot with approximately 23 cm³ of oil. Refer to *Figure 36*.

Recommended types of oil: non-detergent and without aggressive additives, viscosity VG32 (ISO 3448). E.g., oil for pneumatic devices or hydraulic oil.

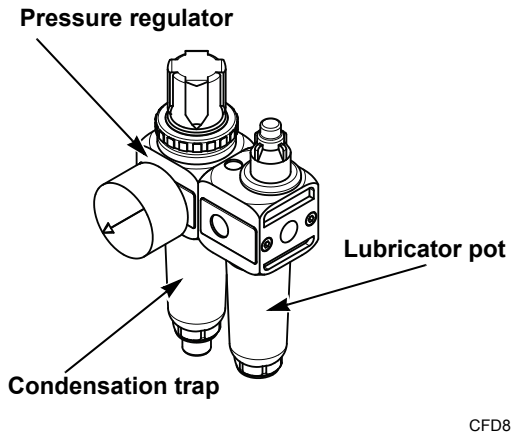


Figure 36

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Driving Mechanism

On new machines and after a belt replacement, make an inspection of the belt tightness:

1. After first 24 hours of operation
2. After first 80 hours of operation
3. Every 6 months or every 1000 operation hours - whichever comes first.

Inspection of Belt Tightness

WARNING

Before you start, turn off the main switch to avoid possible injuries!

W856

The belts are accessible after the rear or side cover has been dismantled. if the belts are too tight, the bearing seatings are under stress and their life service has been shortened.

If the belts are too loose, they can slip on the pulley and cause noisy operation.

In the case of need, tighten the belts. Change the belts if worn out or damaged.

Testing force of belt tensioning which can be measured by tension meter is indicated in *Table 19*.

The procedure for approximate belt tensioning according to the force measured by the tension meter:

Apply a load at the middle of the belt. The data is valid only for belts from the manufacturer.

Model	75/335	90/400	125/520	180/800	230/1000	275/1200
Belt Deflection, mm (in.)	20 (.78)	20 (.78)	20 (.78)	12.3 (.48)	9 (.35)	9 (.35)
Force in Belt Deflection, N	53 - 54	68 - 69	68 - 69	11 - 12	20 - 22	20 - 22
Force Measured by Device, N	200	300	300	-	-	-
Frequency Measured by Device, Hz	-	-	-	36 - 37	35 - 37	35 - 37

Table 19

Belt Replacement

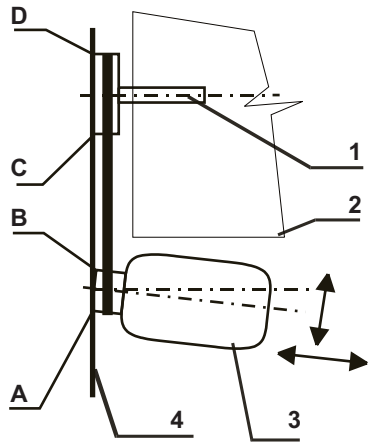
IMPORTANT: Never use a crowbar to take off the belts over the pulley grooves.

Loosen the bolts of the tightening pulley on the drum rear wall and the adjusting screw for taking the belts off. Always change a complete set of the belts. Always use the same type of belts in the same set. If the pulleys are damaged, replace them.

After the belt replacement, check the pulley alignment, the tightness of belts, bolts and nuts. Keep the belts and pulleys clean and free of oil, lubricants, water, etc.

Pulley Alignment

A precondition for the reliable operation and long service life of the belts is a proper pulley alignment. Do the inspection of the alignment by means of a ruler (*Figure 37*), placing it on the pulley faces. If all points (A, B, C, D) are touching the ruler, the pulleys are aligned.



1 Main housing with the pulley
2 Drum
3 Drive motor
4 Ruler

Figure 37

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Steam Filters

Machines are equipped with filters on steam inlets (if the machine has steam heating). It is necessary to clean up the filters occasionally to avoid a prolongation of filling the machine with water. Intervals between cleaning depend on the quantity of foreign particles in the water line.

Cleaning the Filter

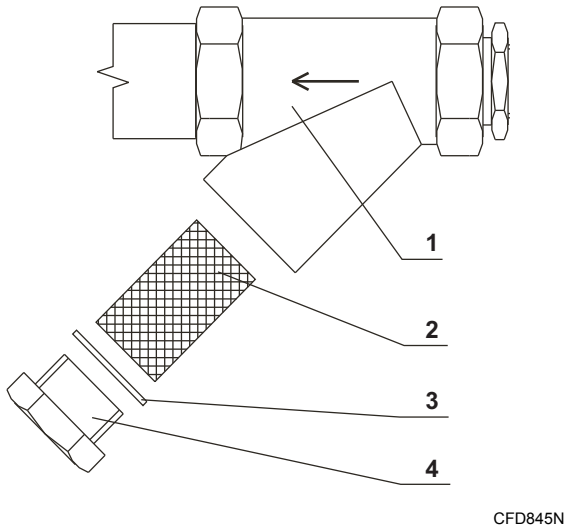
1. Stop the steam inlet to the machine.

WARNING

Before you start cleaning the filter, check to see if the steam inlet to machine is closed and cold!

W857

2. Unscrew the filter plug (*Figure 38*, pos. 4) and remove the filter sieve (2).
3. Clean the sieve with running water or compressed air.
4. Put the sieve (2) and gasket (3) back on the filter body (1) and tighten the plug (4).



1 Filter body
2 Filter sieve
3 Gasket
4 Plug

Figure 38

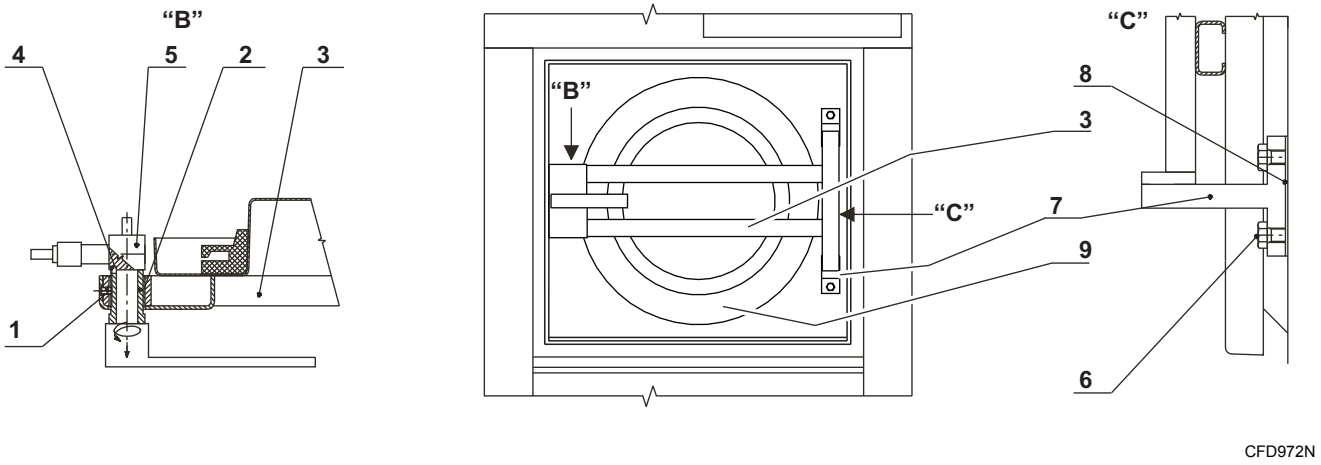
Thrust of Door Seal

If there is water leakage around the door, check to see if it has been caused by the door shifting out of its position or if the door seal thrust should be adjusted. In some cases the door seal has to replaced.

Adjusting on the Side of the Door Handle

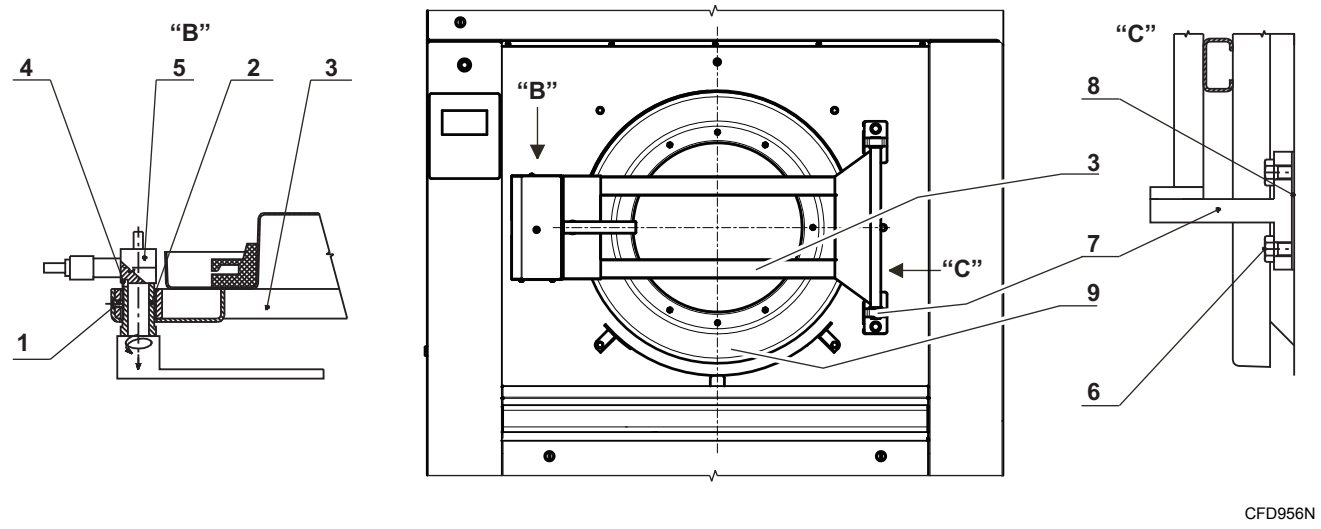
1. Unscrew the bolt (Refer to *Figure 39* for 75/335, 90/400 and 125/520 models and to *Figure 40* for 180/800, 230/1000 and 275/1200 models, detail "B", pos. 1), securing the casing of the door handle (2).
2. Unscrew the casing (2) from the door bearer (3) always by a whole turn so that the groove in the casing thread (2) appears below the securing bolt (1).
3. To make the casing turning (2) easier, use the semicircle notches (4) between the casing (2) and the handle pin (5), in which you insert a cylindrical object (a bolt, etc.). By turning the handle, the casing (2) will also move.
4. After the door thrust has been adjusted, tighten up the securing bolt (1) to the groove in the casing (2) thread.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT



1	Handle bolt	**6**	Hinge bolt
2	Handle sleeve	**7**	Hinge
3	Door carrier beam	**8**	Elimination washer
4	Semicircle cuts	**9**	Door
5	Handle pin		

Figure 39



1	Handle bolt	**6**	Hinge bolt
2	Handle sleeve	**7**	Hinge
3	Door carrier beam	**8**	Elimination washer
4	Semicircle cuts	**9**	Door
5	Handle pin		

Figure 40

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Spring Unit - Models 75/335, 90/400 and 125/520

Adjusted by manufacturer.

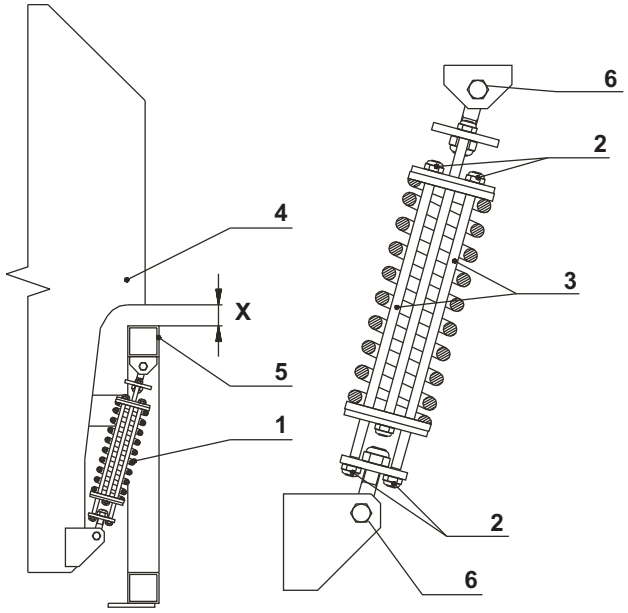
Spring units are to be adjusted in the case that you found out the suspended machine part is not in a horizontal position (without linen and water) or after the spring unit has been replaced. Refer to *Figure 41*.

WARNING!

MAIN SWITCH MUST BE OFF!

The spring unit adjusting is achieved by turning the nuts (2) with the same number always simultaneously on the opposite guiding rod (3) of spring unit.

The adjustment is correct when a same gap in all four corners of the suspended machine part has been achieved. (X = 55 mm/ 2.16 inches) between the plate edge (4) of the vibrating part and the frame top surface (5).



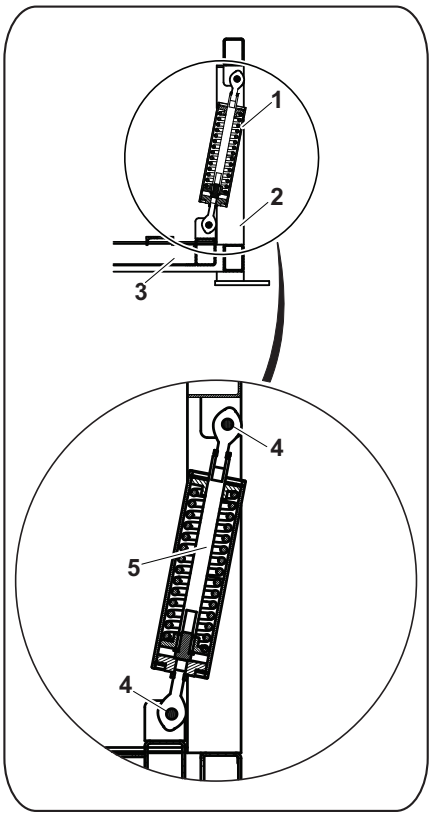
1	Spring unit	**4**	Suspended part
2	Adjusting nuts	**5**	Machine frame
3	Guiding rods	**6**	Spring suspension eyes

Figure 41

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Spring Unit - Models 180/800, 230/1000 and 275/1200

Adjusted by manufacturer.



CFD957N

1	Spring unit	**4**	Suspension spring eyes
2	Machine frame	**5**	Guiding rods
3	Suspended part		

Figure 42

Replacement Washer Fuses

Fuse Values

The correct values of fuses can be found in the vicinity of the fuse holders, on the electrical scheme and delivered with the machine. When a fuse is blown, you can replace it with the same value but NOT with a higher value. If the fuse blows again, do not change it, but find the cause of the failure. Contact your distributor for help if necessary.

Earth Leakage Trips

If the laundry is equipped with the earth leakage trip in the inlet circuit of the electric switchboard, it is necessary to test it regularly. The earth leakage trip is a very sensitive device which provides a safety for operators avoiding the risk of electric shock while the machine is in operation.

WARNING

A qualified worker must perform a test of the earth leakage trip function at least once every 3 months.

W858

The Test Procedure

Press the test push button of the earth leakage trip while it is under tension. The earth leakage trip must go off!

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Troubleshooting Aids

Door Blocking

Description of Door Lock Function

The door lock has been designed as a compact unit. Its function is to secure the door against the opening during the washing cycle. When the cycle is finished, the unlocking is done automatically by a programmer.

The lock is also blocked during failure situations, e.g., electric network black out, before and after the machine installation, etc. You can unlock it in case of an emergency according to the procedure hereafter described.

Lock without Tensions before the Program Start

It is possible to open and shut the washing machine door any time. The lock will not be blocked; coils with the latch are not active.

Main Switch and Emergency Stop Button are Switched On

Door Shutting

The lock is secured by a blocking latch after the door is shut and the program has been started. In this moment, it is not possible to open the door.

Door Opening

The door can be opened after the lock is unblocked and when the blocking latch moves to the non-active position. This situation occurs at the end of a program or when pressing the **Stop** button.

Current Failure During Operation

When the power supply has been interrupted during a wash cycle, the door lock stays in a blocked position, and the door cannot be opened.

Unblocking the Door Lock in Case of Emergency

If the power blackout takes too long, you can make an emergency unblocking of the door lock. The emergency door opening procedure is as follows:

WARNING

Before the emergency door opening, turn off the machine main switch! Never open the door while drum is still running! Never open the door if "Too Hot" is indicated! Risk of burn or scald injuries! Never open the door if the machine parts feel too warm! Do not open the door until there is no water in the drum or the water will flow out after opening the door!

W859

1. Verify if all conditions are present to safely open the door.
2. For 75/335, 90/400 and 125/520 models, insert a tool with a maximum diameter of 5.5 mm (.21 in.) into the finger protection hole in the door lock cover and push softly. Refer to *Figure 44*.

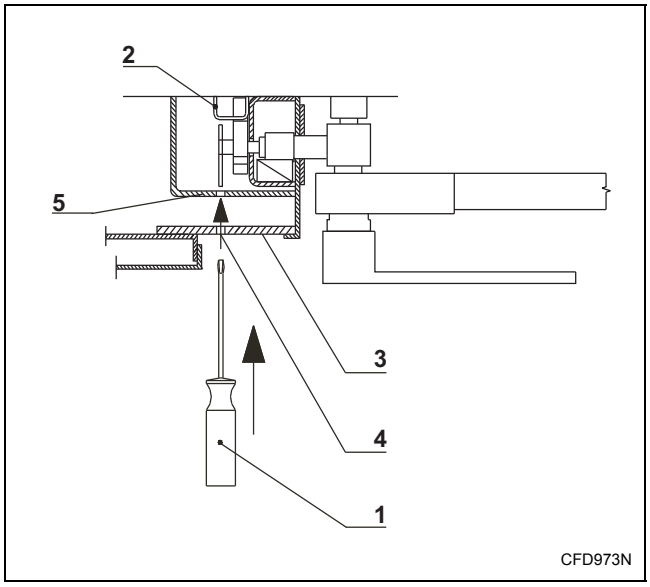


Figure 43

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

3. For 180/800 and 275/1200 models unscrew the bolt in the lock cover, Refer to *Figure 44*. Insert a screwdriver into the hole in the lock cover and push softly.
4. By this, the latch mechanism is lifted up and the lock is unblocked. The lock stays unblocked even after the tool removal.
5. Open the door if all safety conditions are fulfilled.

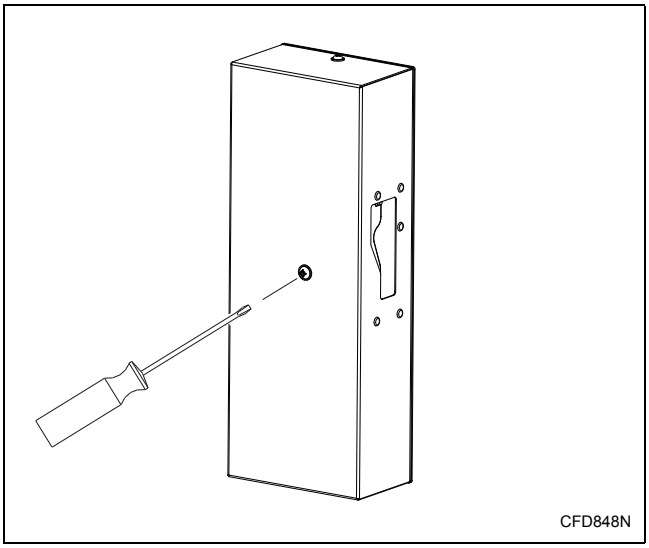


Figure 44

Error Indication Shown on Display

See ***Programming Manual***.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Putting the Machine out of Service

If the machine is out of service, follow these instructions.

Disconnecting the Machine

1. Switch off the external electric power inlet to the machine.
2. Turn off the main switch on the machine rear.
3. Shut the external steam inlet to the machine.
4. Make sure that the external electric power steam inlets are shut off. Disconnect all electric, water or steam inlets.
5. Insulate the external electric power inlet conductors.
6. Equip the machine with an “Out of service” sign.
7. Unscrew nuts (bolts) fixing the machine to the floor.
8. During transportation, follow the instructions *Important Information Before Installation* and *Handling, Transportation and Storage*.

If the machine will never be used again, secure it so that injury of persons, damage to health, property and nature is avoided. Make sure persons or animals can not be enclosed inside the machine and injury of persons by moving or sharp parts of the machine can not occur (e.g., remove the door, secure the drum against turning, etc.).

IMPORTANT: Be careful: falling door and glass can cause injuries!

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT

Machine Disposal

WARNING

Take all necessary action and precautions when disassembling the washer to avoid injuries by glass or sharp metal edges.

W860

Possibility of the Machine Disposal by a Specialized Company

Information concerning the WEEE-directive (Waste Electrical and Electronic Equipment, for European Union member states only):

- For the production of the machine that you have purchased, natural resources are being reclaimed and used. The machine can contain substances which are dangerous for health and environment.
- When you dispose of your machine, to avoid spreading of these substances in our environment and to reduce the pressure on our natural resources, we encourage you to use the collection, reuse and recycle system in your region or country. These systems reuse or recycle most of the components.
- The symbol “crossed out bin on wheels” (*Figure 45*), invites you to make use of these systems.
- If you wish more information concerning the systems for collection, reuse or recycling of disposed machines, you can contact the appropriate administration in your region or country for waste management.
- You can also contact the manufacturer for more information concerning the environmental performances of our products.
- Please, consider that the WEEE directive is generally only available for household machines. In some countries professional machines are added, in others not. Therefore, the symbol (*Figure 45*) may not be present.
- Info for dealers: Due to the diversity of the national legislations, the manufacturer can not take all the measures to be in accordance with all national legislation of each member state. We expect that each dealer who imports our appliances into a member state (and puts it on the market) takes the necessary steps to be in compliance with the national legislation (as the directive requires).

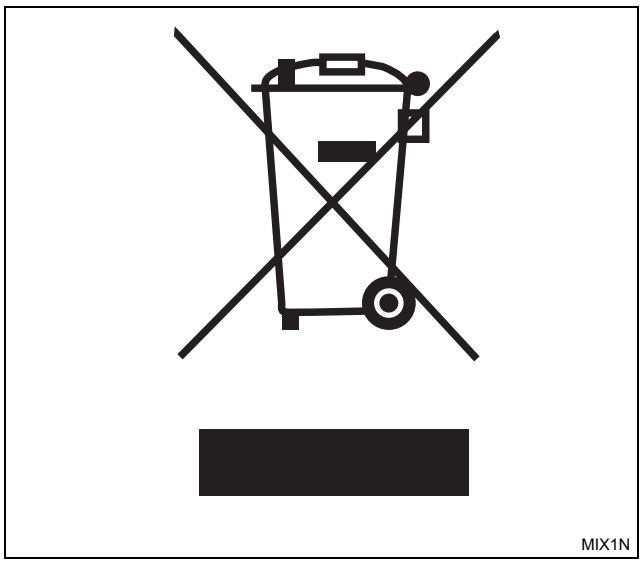


Figure 45

Possibility of the Machine Liquidation by Own Potential

It is necessary to sort out the parts for metal, non-metal, glass, plastics, etc., and bring them to recycling places. The sorted out materials have to be classified into waste groups. Offer the sorted waste to an appropriate company for further treatment.

© Copyright, Alliance Laundry Systems LLC – DO NOT COPY or TRANSMIT